

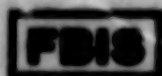
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# **East Europe Report**

**ECONOMIC AND INDUSTRIAL AFFAIRS**

**No. 2051**



**FOREIGN BROADCAST INFORMATION SERVICE**

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9 October 1980

# EAST EUROPE REPORT

## ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2051

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## INTERNATIONAL AFFAIRS

### BRIEFS

YUGOSLAV-ALBANIAN TRADE--In the first 8 months of this year trade in goods and services between Yugoslavia and Albania totaled \$74 million in value, (\$38.6 million in Yugoslav commodity exports, \$10 million in Yugoslav services, and \$25.4 million worth of imports from Albania). Problems in trade between the two countries (largely late deliveries) are expected to be overcome, so that this year's trade will probably reach \$100 million to \$120 million in value, or 52 percent more than the volume planned for 1980 which was \$78.6 million. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 19 Sep 80 p 2]

CSO: 2800

ROLE OF FINANCIAL ORGANS IN IMPROVING ECONOMY

Tirana RRUGA E PARTISE in Albanian No 6, Jun 80 pp 17-31

[Article by Haki Toska, member of Politburo of Albanian Workers Party Central Committee: "Let Us Measure the Perfection of the Work of Financial Organs by the Fulfillment of the Tasks for Improving the Effectiveness of the Economy"]

[Text] In the execution of directives and decisions of the Seventh Party Congress, of the tasks assigned by the plenums of the party Central Committee after the congress and of Comrade Enver Hoxha's recommendations, the financial workers have increased their mobilization and efforts to continually improve the quality of their work, and to improve the active role of finances in the economy, in planning and in executing, thus, to make an ever greater contribution, together with all the people, to the development of the economy and culture, strengthening the defense capacity of the country and improving the living conditions of the masses.

However, seeing the problems from the vantage point of the tasks assigned by the 7th Plenum of the party Central Committee and of the recent recommendations of Comrade Enver Hoxha, the further perfection of the organization and management of work remains an important task for all financial workers, at the center and at the grassroots. The issue is that all the links of the financial system should deal much better than now with the basic economic and financial problems, especially with those matters directly connected with the increase of production, with the further improvement of the effectiveness of the economy and of accumulation and with the continual improvement of monetary circulation, of the strengthening of control by means of the lek, and of the further perfection of work and management in every link of the economy.

The economy and finances develop together and in harmony. The correct understanding of this unity by all workers, especially by the workers of the financial system, requires that we use our mental and physical forces and energies on a calculated basis, with effectiveness and with profitability so that we will protect and use the lek of the people properly, so that every expenditure is carried out strictly within the

requirements of established plans, norms and laws. The implementation of the tasks in these fields to the very last, with initiative and in a creative manner, takes on a particular importance in the present and future situations, when we are building socialism in a hostile capitalist-revisionist ocean that tries directly or indirectly, with all the means at its disposal, to hamper and sabotage the building of socialism in our country.

1.

The improvement of work of financial organs and organizations is rated in accordance with the uninterrupted increase of production and of its effectiveness, constituting the sole source of our social accumulation. Financial means are entrusted by the party and government with very important functions, first of all with the task of playing their active role in increasing and mobilizing the resources of accumulation and in distributing and controlling its correct use. Precisely for these great issues, the scientific, economic and financial thought must be activated in the best way possible, dealing more thoroughly with economic processes and phenomena and keeping better in mind the requirements of the objective economic laws of socialism in every production activity and in other social activity, so that not only the general social product, but also the effectiveness of social production will be increased. "And, when it comes to the laws that deal with the effectiveness of social production," Comrade Enver Hoxha pointed out at the Seventh Plenum of the Party Central Committee, "we must be very careful, because, this is a great and pressing problem for all our economy. Effectiveness is, so to say, the result of all the factors of development of socialist production, the factors which depend on work, struggle and the efforts of all workers."

The problems of the increase and effective use of accumulation have been and are the main issues of the economic policy of the party, closely linked with the implementation of the revolutionary principle of relying on one's own forces. Our socialist state does not accept credits and aid from any capitalist, bourgeois-revisionist country. During the entire 35-year-old historical period of the building of socialism, the financing of the needs for the development of the country has been met mainly by the accumulation of our economy. The year 1979 was the first year that the state budget completely relied on our financial resources; it was successfully fulfilled. Our economy has been financed and has developed in an uninterrupted manner and at high rates. During the first four-month period of the current year, the budget revenues and other financial indicators also were, in general, well fulfilled. These victories have their foundation in the correct party line and in the heroic and impassioned work of our people.

A number of factors, linked and woven together, have influenced the increase of accumulation.

The basic factor for raising accumulation is the increase of production at high rates in all branches. In its struggle with the difficulties of growth and with the obstacles which the imperialism-revisionist encirclement is creating for us, production in our country has been continually increased and has always satisfied, in the best way possible, the needs of the country and of the people. Nevertheless, the party has drawn the attention of its organizations and of the governmental and economic organs to the fact that, in regard to this great problem, we must show more concern, because, the shortages created time after time in specific branches and enterprises cannot help but have negative consequences on the economic and financial situation of the country.

However, to increase accumulation, the reduction of expenditures for production, constructions and services has been and remains a very important factor, from which it is expected to assure the largest part of the growth of accumulation. During the first 4 years of the Sixth Five-Year plan, the majority of economic enterprises, especially those of the machine industry, the chemical fertilizer production industry, the garment and footwear industry and so forth overfulfilled their tasks for the reduction of production costs. However, opportunities and reserves are still very great. There are disturbing problems, especially in the enterprises which do not fulfill the tasks planned for the reduction of costs. Therefore, Comrade Enver Hoxha recommends that, in this field, the bull must be taken by the horns and we must carry out deep plowing.

Practice shows that efforts for the reduction of costs are not as serious as those carried out for the other indicators of the plan. And, in this field, there are important problems that concern planning and implementation, the methods that are being used and record keeping. But, there also is global fulfillment. Thus, for example, in some cases, the tasks for cost reduction in enterprises, districts and ministries are not set on the basis of a scientific work, but on the basis of some general calculations that become the reason for manifestations of subjectivism and voluntarism. In certain enterprises, this important indicator is not analyzed for every factory, department, plant and sector; while, in the clothing, glass and shoe plants we still do not have a cost for production unit; it is calculated and maintained in accordance with the level of expenditures--a fact which obstructs the expansion of the economic-financial analysis for the discovery of internal reserves, for improving the effectiveness of expenditures of work and of materials.

We have a good work experience in the evaluation and pursuit of the problems of costs, especially in the textile combine, the chemical enterprise in Durres, the cement plant in Vlore and in other places. The finance and planning economists of these enterprises are doing a good study work for planning their costs and, on this basis, they are also setting their tasks for applying them to every production link and process. In these enterprises, the cost is not considered as an indicator that concerns the plan and finance branches alone; on the contrary, all the branches, and not only the economists and the plan and financial



specialists, but also the specialists in techniques and technology, must deal with planning and with the pursuit of its execution. Under the concern of the party organizations, the cost has become the object not only of quarterly analyses, but also of monthly analyses and even more frequent analysis in all the links and fields of these enterprises. In the meantime, it has also become the problem of the working collectives.

However, people are not working with the required seriousness, especially planning and finance workers, for the generalization of work experience in these enterprises. There is still no serious effort, a work with scientific bases, to penetrate these great problems, whose solution requires technical, vocational, organizational and managerial capacities; it requires the implementation and improvement of methodology and of the methods of production costs, the direction of the scientific organization of work and harmonization of work between planners and finance workers and other specialists and cadres, beginning with the enterprises and extending to the central departments.

The problems of costs, of profitability and of socialist accumulation, it was stressed at the Seventh Plenum of the Central Committee of the Albanian Workers Party, are of vital interest for the dynamic development of the economy and, as such, they must be considered thoroughly and as a whole, from the time of planning and, later, must be monitored during their execution. Practice shows that, in the specific enterprises, plans for the reduction of costs with reserves are carried out, or that tasks for the reduction of costs are stipulated without harmonizing them with the tasks for the increase of the net revenues of the enterprises. Such cases of disharmony have also been observed in the quotas sent by the ministries for the draft plan of the Seventh Five-Year Plan (1981-1985). Various factors, mainly of a subjective nature, are responsible for such shortcomings and weaknesses; but, the planning and finance workers and economic directors at the grassroots and in departments, by the means of a detailed analysis, can and must know these factors and must exert influence more actively in those directions that bring the improvement of the profitability of the economy and the increase of resources of accumulation. Among other things, it is necessary that, within the framework of improving the methodology of planning, in addition to the tasks for the reduction of costs and for the net revenues of the enterprise, which are plan indicators, it is necessary to stipulate, give and set profitability as a plan indicator, so that the economic cadres will have this indicator as a lever of control for verifying the quality of the planning and execution of the economic and financial indicators.

Time has come for the cadres of the economy to improve their knowledge about these fields, so that they will know and master all the keys of management of enterprises and branches. Above all, it is necessary for finance workers and all specialists and other cadres to become more aware of what Comrade Enver Hoxha said--that production does not mean quantity and quality alone; on the contrary, it is a complex which includes



productivity, costs, profit and profitability, distribution and so forth. Therefore, one of the main fronts for perfecting the direction and organization of work is the struggle against one-sidedness observed in this field which obstructs the entire examination and treatment of the processes of the dynamic development of the economy.

Comrade Enver Hoxha teaches us that the "financial problems, the assurance of domestic resources of accumulation and the problems of the effectiveness of social production in the Seventh Five-Year Plan will be among the most acute problems that require a greater level of guaranty."

The deep understanding of this party recommendation requires complete coordination and complete merging, in one single effort, of the work of workers and specialists in planning, finance, and technology and of other cadres with the problems of production, of distribution, of costs and of the effectiveness of social production that insure the socialist accumulation and the continual financing of our socialist economy.

The monitoring of the economic-financial activity of the enterprises which have losses and which absorb a part of accumulation demands a special attention. The analyses which have been made show that the main reason for these enterprises' unplanned losses is the weaknesses observed in the organizational and management work of the government and economic organs, especially in the work method of some leadership cadres who do not understand and do not correctly evaluate the unity between economic indicators and financial indicators and, consequently, do not struggle with the necessary concern to fulfill all production indicators with full harmony. Life gives us many examples showing that, when this problem has been correctly evaluated and handled, good results have been achieved. Thus, for example, some years ago, the meat and milk combine in Tirana used to have losses; but, when the party organization took the problem in its hands and put all its levers in motion, making the problems of production costs, losses and profitability of the enterprise the concern of the entire collective, of cadres and of specialists, the means to take the enterprise out of its backwardness and to convert it into a fruitful enterprise that gives considerable accumulation to the economy were found.

On the basis of data from progressive enterprises and the work experience of other enterprises, enterprises which used to have losses, but, which now have been converted into fruitful enterprises, there is no reason at all for some agricultural and fishing enterprises to have losses when they have a powerful technical-material base, trained manpower and so forth. Therefore, the financial workers, led by the party organizations, are involved in a serious work to implement the recommendation of the Seventh Plenum of the Central Committee of the Albanian Workers Party, that is, to re-examine and analyze with a critical eye the activity of the backward enterprises and, during this year, to establish concrete measures for improving their economic and financial situation.

Practice shows that some agricultural enterprises and cooperatives make their expenditures for machinery, fertilizer, irrigation, seeds, improvement of livestock breeding and so forth in accordance with the plan and, even, overfulfill them; while, they do not fulfill the planned tasks for increasing yields, production and accumulation. Thus, for example, last year in the agricultural cooperatives, while the revenues for 100 leks materials expenditures were increased by 15 leks more than in 1978, again the effectiveness of expenditures was fulfilled about 11 percent. The use of credits, despite the improvements that have been made, still is not resulting in the required efficiency, especially in the livestock sector. Here, the reasons are mainly of a subjective nature, linked with the failure to fulfill the production tasks, with the insufficient evaluation of financial matters and with weaknesses in the organizational and management work.

Our socialist economy is developing in an uninterrupted manner; therefore, production expenditures are also being increased. However, the issue is that every single lek spent must be calculated "with a well sharpened pencil;" we must have the lek continually under control, taking into consideration its effectiveness and aiming at increasing revenues for every lek spent, because, there are leaders who do not take into consideration the issue of production costs and how production can be fulfilled with as few expenditures as possible, or, if planned expenditures are exceeded, they do not take into consideration the fact that they should be accompanied and justified by an above plan increase of production and accumulation. The party organizations, the government and economic organs and the finance and planning workers must deal better than hitherto with these important problems, carrying out studies, analyses and uninterrupted controls and by drawing the necessary conclusions for improving management and organizational work.

In the past years, a great ideological, explanatory and convincing work has been carried out with the masses of cooperative members for a thorough understanding of the role of accumulation in our present and future conditions, as a basic resource of expanded socialist reproduction in the agricultural cooperatives. As a result, an increase of the accumulation norm has been observed in almost all the districts. The circulating funds and wage guarantee funds have been increased in many agricultural cooperatives; and the initiative of Vlore District to make advance payments not with bank credits but with the means of the cooperatives is being expanded. In this field, however, there are problems that require extended economic-financial studies and concrete measures. First of all, it is necessary that all opportunities to increase accumulation must be used, especially those from industrial crops and from the livestock and fruit growing sectors. But, along with this, it is just as necessary for the use of the accumulation fund to be kept under better observation and under a continual control, because, not infrequently it happens that the accumulation created is not used to the extent required for expanded socialist reproduction, especially for the expansion, protection and supply of the land, for the development of fruit tree growing and livestock

raising and for other purposes. During 1979, some 262 million leks of investments were not made in the agricultural enterprises and cooperatives; and what is worse, some cadres and workers consider this failure to fulfill these planned investments as a savings. Such a concept and practice has negative consequences for increasing production and improving the well-being of the masses. Deficits in investments obstruct the rates of development and compromise the fulfillment of production tasks for the future and, consequently, affect the profitability, the extent of accumulation and the revenues of the members of cooperatives. Along with shortcomings and weaknesses in the fields of management, organization and supply of the necessary material base, erroneous concepts about the role of investments prevent the proper struggle for fulfilling the plan and make them fail to make better use of the many environmental means and other internal reserves for fulfilling their plans. In these circumstances, it is necessary that the responsibility and control of government and economic organs be further strengthened, especially, of the finance and bank organs, in order to influence the complete fulfillment of the tasks in the field of investments in the agricultural cooperatives.

Last year, the financial organs made some serious efforts to participate more extensively in the economic-financial activity of foreign trade and, as a result of this, there were improvements. Nevertheless, the Seventh Plenum of the Party Central Committee recommended that the finance organs further strengthen their influence on the fulfillment of export-import plans. The task is set forth that, along with increasing goods for export and their range, they also improve the effectiveness of foreign trade. But, how can its effectiveness be improved when, in some cases, articles with high production costs of poor quality and badly packaged are being exported? These things happen because the problems of export are not considered thoroughly and as a whole by some cadres and because it is not properly taken into consideration that the profit from the goods that we export depends, first of all, on how much and how we have seen the quality, quantity and value of the goods that we export as a unit.

The quality of goods for export is one of the most acute and most complex problems, reflecting the awareness of workers, the effect of the ideological and organizational measures and the level of production technology and so forth. And, it is a fact that improvements in this field are significant. However, there are euphoria and self-contentment that become obstacles in the work for the further and continuous improvement of the quality of goods and of their packaging and labelling in accordance with the requirement of the times. Thus, for example, last year, Albkontrol [the bureau for inspection and control of import and export goods] blocked some kinds of goods because of their poor quality; these goods, in order to respond to the requirements for export, need supplementary expenditures which are payments completely without production; while, some other goods, also for similar reasons, are sold at low prices on the world market. Therefore, the party recommends that it is essential for its basic organizations to deal with these problems in better way;

they must exert control over the government and economic organs and ask them to report on the correct execution of the guidelines and directives given in this field. In a particular manner, export-import problems and those of currency require more concern and preoccupation and more work and studies on the part of financial and bank organs. It is important that, in regard to these problems, the finance workers operate more actively in the enterprises and cooperatives which produce goods for export and which use imported materials; they must organize meetings and talks and take measures together with production workers and cadres so that they will directly and from close range influence the improvement of work and anticipate situations, not only when everything has ended, when the damage has been done and when supplementary work and materials are needed to put the defects right.

The correct determining of investments on the basis of extensive studies and, especially the use of investments with great effectiveness, is an important field where the work of the finance workers can and must be further strengthened. The deficits that occur in the fulfillment of the investment plan and, consequently, in that of the use of accumulation and, especially, in the creation of new accumulation, show that there is no correct response to the party criticism in regard to surpluses in the planning of investments and in regard to the weaknesses in the organization of work during execution. Despite improvements, the extension of work in many projects at the same time still continues--a fact that influences, in a negative manner, the rates of construction and assembly and the quality and costs of construction. The financing of investments, too, continues to be carried out with shortcomings. In some cases, relations between investors and executors are characterized by a spirit of reciprocal concessions, or reciprocal bureaucratic obstructions are created. In Korce District, for example, after a project was completed and put into operation, the investor and the constructor, instead of settling together the financial problems that had emerged, started sending reports of many pages and of many points to each other. And, such activities, that create artificial difficulties and obstacles, sometimes to the construction itself and sometimes to the investors, which take whole months to settle because of the slowness of the financial and bank organs, exist in many districts. The task is that we must raise the economic-financial work in investments to a higher level, that more studies and analyses must be carried out, that the profit from every project in the construction-assembly sector and in exploitation must be better documented and that the extension of investments below limits must not be permitted, as happens in some districts. Everything must be carried out with calculation, pencil in hand and under strict control, correctly solving the technical-technological and economic-financial problems so that projects are put into operation as soon as possible and with full capacity. In this field there is a great deal of rich experience, such as the experience of the nitrogen fertilizer plant in Fier District, of the superphosphate plant in Lac, of the auto-tractor combine in Tirana, or the copper metallurgical plant in Rubik and so forth, where the



planned capacities have been overfulfilled and where the profitability of production has been continually improved. However, this experience must be generalized, taking into consideration the fact that production capacities, technology and profitability in enterprises are not static data, which are given once and for all; on the contrary, they change continually in the dynamism of development because of the work and struggle waged by workers, specialists and cadres for putting production on more and more scientific bases.

The effectiveness of our economy is closely linked with the increase of the purchasing power of the lek and with the continuing improvement of monetary circulation. Knowing and better implementing the requirements of the laws of the money in circulation, the government and economic-financial organs at the center and the base, under the leadership of the party organization, have made improvements in the field of planning and execution. However, the finance and bank workers, as Comrade Enver Hoxha teaches us are assigned great tasks so that they will be more sensitive to any phenomenon connected with monetary circulation and that they must not be lulled to sleep by the idea that no evil can happen to us because we are a socialist country. We must be vigilant; we must foresee the events; we must close all the paths to the possible manifestation of inflation.

In this framework, along with the priority increase of the production of the means of production, special importance is assigned to the continuing increase of consumer goods. In this field, the party has assigned a number of concrete tasks to the production enterprises, the trade enterprises and the financial and bank organs. However, the influence of financial organs on the production, distribution and circulation of goods cannot be exerted from the office nor by letters; on the contrary, it can be exerted by moving the work as near to the enterprises and cooperatives as possible, where production, assortments, quality, contracts, difficulties and obstacles that emerge, as well as the opportunities and roads to overcome them, can be seen with the eyes and touched with the hands. We stress this because many finance and bank workers do not show proper concern for fulfilling the production plans and for their distribution on schedule, for utilizing all their possibilities and domestic reserves and for increasing production and improving its quality. Let us be more anxious when we see that in some enterprises the use of raw materials and of other materials is not given proper attention on the basis of established norms and, consequently, the norms are exceeded; when we still have materials whose norms for consumption have not been established; and when the coefficients for the utilization of steel, timber and so forth are still low. Let us think hard and work with pencil in hand to prevent everything that is produced with the efforts and sweat of the people from being wasted and to further increase the range of the production of consumer goods, because, this is how we will further increase production and accumulation and satisfy more and more the increasing needs of the working masses.



The correct and economical use of the wage fund is given a particular importance, especially in the conditions of the comprehensive development of our economy. Improvements have been achieved continually, and other improvements must be made, in the field of the planning, use and control of the wage fund, on the basis of thorough studies. Nevertheless, there are still enterprises that exceed the wage fund without documenting it with production and accumulation; or there are agricultural cooperatives which do not reach their expected results in production and in revenues in harmony with the wage fund that has been consumed. The positive experience gained by some economic enterprises, where the influence of financial organs has been greater, must be disseminated in the other enterprises, especially in the agricultural cooperatives where problems in connection with planning and the correct use of the wages fund have emerged and continually emerge.

As practice has shown, the effectiveness of the use of wage fund is improved when it is seen and used in close correlation with the quantitative and qualitative indicators of production, with the perfection of the forms of compensation for work, correctly executing the requirements of the socialist economic law on compensation in accordance with the quality and quantity of work, so that the workers who work more and better are encouraged. Of course, those are matters that require thorough studies with great responsibility in accordance with the special characteristics of every branch of our people's economy. However, the correct solution, in a scientific manner, of the problems that arise in the field of the wage fund also requires more powerful and effective struggle against the manifestations of liberalism and bureaucracy observed in many cases. In some bank branches in the districts, the functions of control of the wage fund are extended up to the enterprise management and do not go further down, where the excess of expenditures has been made and where the situation can be improved. Even less do they go to the agricultural cooperatives, especially to sectors and brigades. To improve work in these fields, the finance and bank workers must play their proper role in regard to the correct execution of the socialist principles of distribution, so that wages will be earned through sweat and useful work for society, preventing all the cases of irrational use of the wage fund which can become a source of many evil things of an economic and social nature and, in a particular manner, can become an obstacle for increasing the effectiveness of production. Correct relationships between production, labor productivity and the average pay of workers must be established from the time of planning and be maintained, especially, during the period of implementation.

2.

The Seventh Plenum of the Party Central Committee opened new horizons for the further perfection of the work method of finance and bank workers. The party demands that we become involved in concrete actions for perfecting organizational and management work, especially at the grassroots,

where petroleum and minerals are extracted and where machinery, equipment, spare parts, raw materials and consumer goods are produced and in the enterprises which produce goods for export; and that we pursue the implementation of our programs in a broad front, because, there are cases when our workers shut themselves in their offices and deal with paper work more than they should. The nearer to the workers, cooperative members and finance workers, who struggle at the grassroots, we go, the better the situation will be known, the more valuable studies will be carried out and the better the financial thought and the active role of all financial workers at the grassroots and the center will be. The systematic monitoring of the plan tasks requires special attention, with the organizing of a quicker and more complete system of reports on revenues and expenditures, from the enterprises, cooperatives and the sections of the executive committees of the people's councils in the districts up to the ministries.

Good experience has been gained in the monitoring of tasks by financial organs; this must be generalized and further expanded; however, there still is superficial work, especially in some districts. Thus, for example, the financial sections of the executive committees of the people's councils of Tirana, Berat and Kolonje districts and the finance directorate of the Ministry of Light Industry and the Food Industry work much better than the finance sections of the executive committees of the people's councils of Elbasan, Pier, Librazhd and Tepelene districts. The effectiveness of credits is better evaluated by the Durres Bank than by the Korce Bank. The financial organs of the Vlore District study and solve the export problems better than those of Lushnje and Mat districts. The social security branches in Elbasan and Mirdite monitor temporary work disability much better than the Tirana, Gjirokastr and Diber branches. The agricultural banks in Tirana and Gjirokastr monitor the use and banking of credits in agriculture much better than those in Kruje and Shkoder and so forth.

The improvement of scientific direction and organization requires, first of all, the further perfection of financial planning. On the basis of experience gained, the quality of financial plans has been continually improved; and serious efforts are being made to better and better coordinate the financial indicators and other economic indicators of production. But, in this field, much remains to be done, especially in regard to the drafting of a scientific and mobilizing plan, discovering all the reserves and planning their complete activation, because, only where the plans are tight, Comrade Enver Hoxha teaches us, are mobilization, struggle and efforts of workers, and their successes, greater. The opposite takes place where plans with reserves are drawn up. In particular, attention must be given to the drafting of tight plans for costs, for product on and for quality and for the other qualitative indicators of the plan, because, they will become a lever of encouragement in order to vitalize and strengthen work in enterprises and cooperatives.

To avoid cases of setting tasks lower than the real possibilities that these indicators have, it is essential that, when planning them, we rely on the progressive average, on the experience of advanced workers. However, to avert formalism, subjectivism and voluntarism in this issue, it is necessary that we study the progressive experience extensively and discover the ideological, political, technical and organizational factors that have led to the achievement of high results and, on this basis, the concrete measures must be established in accordance with the conditions of every economic enterprise, agricultural cooperative and state institution. The driver Dhimiter Deliborgji made extensive changes in using motor fuel sparingly, in the technical-utilization indicators of his vehicle and in prolonging the life of his vehicle. Lida Thoma, a teacher in the Agricultural Institute in Korce gave a distinguished example in the application of mathematics in the economy. Olga Konomi, a worker of the Stalin textile combine in Tirana, became the initiator of a whole movement converting temporary disability to permanent work ability. But, such examples that tell about the high awareness of our people educated by the party, about their inspiring and passionate work and about their minds and golden hands, that can create wonderful things, are found everywhere. The financial workers should not only record these precious morals and material values; the main thing is that they should devote all their capacities and exert all their influence so that it is planned on the basis of these successes. "The active role of the plan and of finances," Comrade Enver Hoxha stresses, "would appear even greater when it includes, as tasks of the plan, the best achievements of advanced workers and of the progressive working brigades within the enterprise and the cooperative and outside them as well."

Coordination, from the time of planning, of economic indicators of production and the financial indicators is a problem requiring continual attention, because any change carried out in economic indicators of production, without being accompanied by relevant changes in financial indicators, would create disharmony and would bring anomaly to the production process and financial activity. Cases of superficial work and failure to reflect in the financial indicators the changes made in the economic indicators were also observed during the work for drafting the 1980 plan. In regard to such manifestations, first of all, the financial workers, from the control departments and districts down to the grassroots workers, in the economic enterprises, agricultural cooperatives and in every unit of social production, must find their own responsibility.

An erroneous tendency, which must be fought more vigorously, is that of setting more pressing tasks for the last quarter of the year. Thus, for example, the planned accumulation in the second half of last year was 18 percent greater than that of the first half. Despite improvements, this problem, in some cases also appears in the plan of this year. However, such work practice becomes the cause for creating an unjustified euphoria in the first months of the year, and later on weaknesses and irregularities are created in the execution of economic-financial tasks.

This is why, it is necessary for the financial organs to work with more responsibility during all the phases of planning and implementation, struggling against any manifestation of formalism.

In the field of planning and implementation in general, and also in the financial field, important problems arise in regard to the execution of the party line, such as, for example: How much are the plan targets being explained to the workers and cooperative members? How is the opinion of the grassroots workers taken into consideration by the state organs in the districts and how is the opinion of the district state organs taken into consideration by the central ministries? Do they develop debates so that one link can convince an other link through arguments, or, under the pretext that "there is no time," are changes made in an arbitrary manner by the higher organs? Is there a principled struggle, or are compromises made, such as, "you let go a little, so that I also can let go and, thus, we arrive at the same idea, together, in order to avoid headaches," as happens sometimes in the course of discussions between the ministries and the sections of the executive committees of the district people's councils.

These are problems of an ideological-political, economic and organizational nature that deserve a greater attention than they have received so far so they can always be solved with party-mindedness. The finance workers, like the planning workers and all specialists and cadres, must always give their opinion on every economic-financial problem, relying on the party line, on the study of phenomena, on the economic laws and on our revolutionary law, giving importance to revolutionary debate, as a means that expands and further improves work, the economic-financial thought and studies and that discovers and solves the contradictions that arise on the road to our socialist development. The party recommends that we be top revolutionaries, always on the attack. Correctly and consistently developing the class struggle, let us not be satisfied with small plans in production, accumulation and exports or with keeping manpower above the plan or with having expenditures without production; and let us not tolerate the cover up and softening of attitudes toward cases of violation of the law, cases that are discovered by the control-review process. We must allow with anything that contradicts the financial policy of the party.

On the basis of the party directives, work continues everywhere for the drawing up of the draft of the Seventh Five-Year Plan, a plan that fully relies on our own forces. For the first time, in this five-year plan, the financial indicators will be discussed and drafted in detail along with the economic indicators. This is a great and responsible task for all finance workers; it requires a total mobilization, knowledge and precision for planning the state financial and monetary resources and for a distribution of these funds as wisely as possible, with profit and with precise calculations.



One of the main characteristics of the new five-year plan, which is being drafted, is the harmonization, the organic relationship of the economic aspect with the financial aspect of the plan, meaning that the process of the drawing up of the draft plan will unite the economic indicators and the financial indicators, doing this work at the same time, with the same reliability and with responsibility. The correct understanding and execution of this unity by the state and economic organs in general and by the financial organs in particular will make it possible to avoid cases when extensive operations to increase revenues and to reduce expenditures are made at the center. These operations must be carried out on schedule in the economic enterprises and agricultural cooperatives, where the resources of accumulation are produced and the reduction of expenditures takes concrete form. The party has stressed that the guiding quotas for the monetary and hard-currency revenues should be considered as a minimum and that, during the discussions and drawing up of the plans, they must be increased, discovering the internal reserves which our socialist economy has and continually creates; while, the guiding quotas for the monetary and hard currency expenditures must be considered as a maximum limit and that efforts must be made to reduce them by finding ways to strengthen the system of savings. It is precisely in these fields that it is necessary for the economic and financial ideas of our cadres to be elevated higher by implementing the criteria, methods and methodology of our socialist planning more broadly and more thoroughly, especially in order to execute the tasks assigned to us by Comrade Enver Hoxha's recommendation that only by the means of a most scientific and most tight planning would it be possible to implement the party directives on the improvement of the effectiveness of the economy and on the increase of material, financial and hard currency reserves.

In strengthening the dialectical unity between economic and financial indicators, both in planning and in implementation, an important role is played by the 10-day and monthly economic and financial analyses in economic enterprises, agricultural cooperatives, in districts and ministries, including data not on the books. These analyses, which must be used in discovering and analyzing the concrete economic and financial phenomena, the relationships between economic and financial indicators, weaknesses and shortcomings and their causes and determining the measures that should be taken, will also serve as schools for increasing the knowledge of cadres and of the masses for managing the economy and as schools for learning the requirements of the objective economic laws of socialism.

In the enterprises, agricultural cooperatives, the executive committees of the district people's councils and ministries, the party has brought in and trained new cadres, and will continually bring in and train new cadres that distinguish themselves by their work, management and administration--such as engineers, agronomists, economists and others. But, in order to properly execute the tasks entrusted to them, these comrades must work more and with determination to extend their knowledge in accordance with the new tasks entrusted to them in their trusted functions.



For example, how much does an engineer or economist know about the economy and finances and how much do they know about the science of management of the enterprise or of the cooperative they are managing? Likewise, the question is asked: how much does an economist know about agrotechnology, techniques and technology? It is through economic and financial analyses, when these problems are debated, in their complexity, in sessions in which all cadres and workers participate, that people learn how to manage and to administer, therefore, how to hold the keys of the management and organization of the economy. However, in the present stage, the time has come to think better about and better execute the work forms for improving the economic and financial knowledge of cadres and the masses, such as the courses with and without interruption of work, to be attended by brigade workers and persons in charge of sectors, work centers and plants, directors of enterprises and chairmen of cooperatives and so forth. There is no scientific management of the economy without a knowledge of finances, just as there is no scientific management of finances without knowledge of the economy.

The solution of the problems, that emerge every day from the development of the economy, requires the continuous improvement of the level of training of workers of the financial system. The initiation of a post-graduate course is a good thing; but, this is insufficient. Therefore, measures have been taken to start such courses not only at the central level, but also in the districts, in order that all the workers of the financial system will be able to supplement and enrich their financial knowledge every 4-5 years. Within this framework, tasks are also set for the training of youths and students who are attending schools with or without interruption of work. This problem is also very important for the workers of the financial system who do not have the necessary vocational education, using different work forms, such as seminars, consultations for special problems, schools of progressive experience and so forth.

The administration and preservation of socialist property have always been and remain in the center of attention of finance workers. The party sets, as the main task, the implementation of preventive measures for the protection of property against appropriation, bad administration, damages and abuses. Of course, in regard to this, priority has been given and must be given to the educational work and to the knowledge of the laws by workers; but, of no less importance is the perfection of the record keeping that accompanies the movement of property and the perfection of other organizational and administrative measures, on the one hand, so that the workers themselves will protect socialist property and, on the other hand, to close the gaps as much as possible through which the abusers and damagers of socialist property might infiltrate. Within this framework, it is necessary to strengthen control over production and distribution by the means of the lek and over any work process by making calculations with a pencil in hand and by comparing material assets according to their weight, number and value and by noting the differences

and their causes. However, these controls are not the task of the examiner or the auditor alone, as some people may think; on the contrary, they are the task of all those who are entrusted with the organization and management of production in the brigade, unit, sector, plant, enterprise and cooperative, of all those who carry out the work processes and of the worker, cooperative member, brigade worker, examiner, auditor, agronomist, engineer, branch leader and of the director and so forth. The party demands that he who produces and manages must also examine. Of course, in this field, the specialized organs of the control-review department and the worker-peasant control, led by the party organizations, have special tasks with great responsibility.

Our working masses, under the party leadership are tackling the job with great revolutionary spirit so as to fulfill the 1980 plans; and, in general, the results achieved so far are good. The finance workers, as the Seventh Plenum of the Central Committee of the Albanian Workers Party has recommended, are required to work with taut nerves, to totally mobilize their mental and physical energies and coordinate their activities with all the governmental and economic links. Let us take into consideration the fact that we had failures in fulfilling the plan in some economic and financial indicators during the past five-month period. Therefore- it is necessary to correctly understand and correctly implement Comrade Enver Hoxha's recommendation that finances must have great assurance of accumulation; and this must be reached not only in the drafting of the Seventh Five-Year Plan, but also in the fulfillment of the plan tasks for 1980, the last year of the Sixth Five-Year Plan. The issues of increasing production and accumulation and the continuing improvement, at high rates, of the effectiveness of the economy are the capital problems of the economic policy of the party; their implementation requires the further perfection of the management and organization of work by the party organizations and by state, economic and financial organs.

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# IMPROVED TECHNOLOGY NEEDED IN CONSUMER GOODS PRODUCTION

Tirana RRUGA E PARTISE in Albanian No 6, Jun 80 pp 32-40

[Article by Shaqir Prizreni: "Perfection of Techniques and Technology in Consumer Goods Production--an Important Field of the Technical and Scientific Revolution"]

[Text] During the Sixth Five-Year Plan, our people, confronting and overcoming the difficulties of growth and the many obstacles created by the capitalist and revisionist encirclement and blockades, by complicated international situations and circumstances, have made important steps forward in the building of socialism of the country. Especially important are the achievements in the further invigoration of our socialist economy and in the improvement of its independence and self-sufficiency. During this period, many acute economic and social problems were solved. The study, designing and construction of many important projects by our people in the branches of the economy and, especially in industry, and the completion and putting into operation of dozens of projects, which were abandoned and sabotaged by the Chinese revisionists, are a living proof of the vitality of our socialist economy, of the awareness and creative capacity of our working class and people's intelligentia, of the life-giving force of Marxism-Leninism and of the correctness of the economic policy pursued by our party.

Our party, relying on the objective economic laws of socialism, on Marxist-Leninist ideology and on Comrade Enver Hoxha's teachings, in accordance with the concrete conditions prevailing in our country and with the international situations, has built and is implementing an economic policy on the basis of which the development of the different branches of the economy will be carried out in established relationships and in full harmony between them. It is true, for example, that in the party policy for the socialist industrialization of the country, priority has been given and is being given to the development of the industry for the production of the means of production, as the main supporting base for the development of all economic branches and to the invigoration of the defense capacity of the fatherland. However, in full harmony with this, the rapid development of the other branches of the economy and, within

this framework, the development of the consumer goods industry, have never been underrated, so as to satisfy more and more, in quantity and in quality, from a revolutionary point of view, the always increasing needs of the people and of the economy for products of this industry. This fact is proven by the 35-years of activity after the liberation.

During these decades of the people's government, the overall industrial production increased more than 125 times, while that of light industry and the food industry increased about 75 times. And, if we take into consideration the fact that in the structure of the overall industrial production before the liberation the products of light industry and the food industry accounted for about 70 percent of the overall industrial production, then, the rapid development of this industry during these 35 years is more apparent. Now, our light industry and food industry is a multi-branch industry, mainly relying on the processing of the raw and auxiliary materials of the country and, first of all, on the products of our socialist agriculture. As all our industry, the consumer goods industry is a new industry, created on the basis of advanced techniques and technology of the times. It is meaningful that our country, which before the liberation used to import almost every industrialized article, today not only satisfies more than 80 percent of its needs with products from our industry, but even exports some of its goods, thus, guaranteeing considerable hard currency in revenues.

However, in spite of the great and rapid progress in the development of the light industry and the food industry, in order that the increasing needs of the masses will be satisfied in the best way possible and the production of consumer goods will cover the purchasing power of the population in best way possible, the party has assigned the tasks so that this branch of our socialist industry will undergo a further quantitative and qualitative development, especially in the coming five-year plan. The fulfillment of these tasks requires that the working people of light industry and the food industry, and workers, technicians, engineers and specialists in production enterprises and scientific-research centers think and work better than upto now in order to know, analyze and implement the directives and guidelines of the party and further perfect their style and work method, mainly dealing with the key problems of the development and modernization of this industry, correctly and most effectively utilizing the great opportunities that the party has created for the further development and expansion of the technical and scientific revolution; and, in this important sphere of social production, especially in those main fields where problems requiring solution are more acute and, aiming at discovering and using internal reserves in the best way possible, they must think and work better for improving production capacities, for the complex and judicious processing of raw and auxiliary materials and for improving the quality of products and so forth.

In the present conditions, the continuing perfection of existing techniques and technology of the consumer goods industry and the gradual introduction, in a studied and organized way, of modern techniques and



technology constitute the basic directions of the development and expansion of the technical-scientific revolution in this branch of the economy.

We stress this not because little has been done in this field; on the contrary, from one five-year plan to the other, there have been reconstructions, expansions and technical-technological improvements in the existing lines, departments, factories, plants and combines, as well as new constructions, in this industry. And, in these expansions and reconstructions and in these new constructions, the new techniques and technology have been continuously replacing what has been "out-moded" by the time; mechanization of the work and production, processes has been improved and automation and chemical, thermophysical and biochemical processes and so forth are being introduced at a more and more expanded level. However, it is a fact that, despite the continuing invigoration of this branch of the industry, still it does not always and properly respond to the quantitative and qualitative requirements of the people and the economy, and to the requirements of exports. The food and light industry enterprises are not always in a position to "absorb" and process, rapidly and without waste, all the agricultural and livestock products. Despite the technical and technological changes carried out in the canned goods and sugar products, leather shoe ready-made clothes, and glass and ceramics factories and so forth, their level of mechanization and automation is still low in comparison with some other new branches of industry, such as the electrical, chemical, and machine branches and other branches; the technological processes are getting out-moded in some cases; and, in some other cases, there are some artisan forms of work and of production. As a result, in these branches of light industry and the food industry, labor productivity is still relatively low, the quality of goods does not fully respond to the requirements of the times and the norms for the consumption of goods and for raw and auxiliary materials are high. All this results in the fact that the goods of these industries are produced at relatively high costs and also results in the failure to produce the necessary accumulation, and some enterprises of this industry even create a "heavy burden" for our economy, in general. Therefore, the further development and extension of the technical and scientific revolution in the sphere of production of consumer goods has become an essential requirement and has a very large field of action.

In regard to technical progress in the enterprises of light industry and the food industry and in regard to the implementation of techniques, technology and most advanced methods of work organization in production, it is necessary that all be interested, whether they are simple workers or specialists and cadres of production and of the scientific-research institutions, in finding the best means, according to requirements and concrete conditions, with the foremost aim that every advancement in techniques and technology will not only be socially necessary and technically feasible, but also economically profitable, in harmony with the requirements of the principle of relying on one's own forces. These requirements are the foundation of every study and design for the technical and technological perfection of the enterprises of the consumer goods industry.



On the basis of the concrete conditions and possibilities and the present stage of development, the main directions assigned by the party for the perfection of techniques and technology in the consumer goods industry are: first, the most rapid transition in some enterprises from the artisan phase to the organization of mass production by specializing production within the unit, plant, or production center in general, by increasing the coefficient for the complex utilization of raw and auxiliary materials and by mechanizing the work processes which, presently, are done by hand. Second, the passage of production from the existing situation, a situation with stabilized techniques and technology, but relatively backward in some enterprises, to a new and more advanced situation, in accordance with the higher level that has been achieved in the units, plants, and workshops with similar processes. Third, the application of the best achievements of science and of advanced technology, theoretically documented and realized in practice on the national and international level in one established branch or sector of production for the perfection, in their totality, of work means and production processes.

It is understood that such levels of transforming processes, to be achieved through the expansion of the technical and scientific revolution, cannot be reached everywhere at the same time and, especially, in their highest level. As everywhere else, in this sphere of social production, this transformation will be carried out on a well studied and well organized basis, within the limits allowed by our possibilities and circumstances, gradually and in accordance with the concrete conditions where it will be carried out. Priority is given to the solution of those links which are more acute and which cause more disturbance to the unit, plant or enterprise, always pursuing the principle of relying on one's own forces, a fact which does not mean that we should not profit from the experience and from the achievements of science and technology in the other countries through the utilization of foreign literature and the specialization of cadres outside the country even, to the extent of bringing, from abroad, machinery, complete lines and advanced technology when the latter is necessary, especially in the case of the production of a product for the first time, for which the necessary experience is lacking. And, within this framework, the first place is initially taken by the problems that deal with the increase of the productivity of social labor through the improvement of the level of mechanization with our domestic possibilities in order to replace manual labor at the highest level, especially in such work operations which are similar for all industrial branches, such as those of the loading and unloading of raw materials, of auxiliary materials, of ready made products and of the remnants of production, as well as their internal transportation. Also, it is necessary to replace, as soon as possible, some mechanical and physical processes with periodic activity, such as, for example, the processes of washing, cleaning, filtering, filling, packaging and labelling in the food industry and the processes of cutting and assembling in the shoe industry, the machine industry and the electrical machine industry. Preparatory operations of dyeing and stiffening in the leather and textile industries and so forth

can be replaced with uninterrupted processes, by introducing more and more elements of automation, especially in the control and direction of the processes for facilitating the work of people and for the possible elimination of subjective factors in the application and interpretation of the best parameters of established processes.

Because of the work done for applying the guidelines of the party in these fields, a good experience has been gained. Thus, for example, along with the work carried out for extending the processing capacities of the sugar plant in Maliq, by our own forces, many technical and technological improvements were achieved, further increasing the level of mechanization and automation in comparison with the situation of the existing plant. In the food industry, the use of clean crops is being intensified, and the biochemical and microbiological processes are also being intensified in the production of yeast for the bread, dairy products, wine, beer and alcohol industries, and so forth, which increase labor productivity, the level of utilization of raw materials and the quality of products. The application of some physical-chemical processes has also improved the effectiveness of refining oils, of crystallizing sugar, and of dyeing textiles and so forth. However, these processes must be applied in a broader way to the drying of food products by the means of the use, especially, of the techniques of drying by vacuuming, by corrugated layers, infra-red rays and so forth. It is necessary to work more seriously on experimentation with processes of preserving food products by means of antibiotics and radioactive isotopes and so forth. Of course, all this cannot be done easily and immediately. A wide path must be opened to the expansion of the technical and scientific revolution in these fields by struggling, among other things, against the restraining concepts of certain cadres and workers and some specialists that, allegedly, the use of such advanced processes on a large scale belongs to a remote future. The pace at which the science and technology of production are developing and the needs for consumer goods set forth the requirement for the use, at a wider and wider level, of new processes and methods. Studies, research-works and experiments of this nature must find more space, especially in the annual and future themes of the study and research centers, such as the Institute for Chemical-Technological Research.

The party has assigned the task that, along with increasing the level of the complex and rational utilization of raw and auxiliary materials, the opportunities must also be found to replace the deficient raw and auxiliary materials with other materials and to find the way to replace those which we continue to import such as, for example, hides, cotton, synthetic fibers, natural rubber and plastics, organic acid and dyes and so forth, and to replace them with domestic materials. In this field, too, the technical and scientific revolution has a very broad field of action. The main thing is that the possibilities that have been created and the considerable funds that have been allocated for their production, in imitations or as actual products, must be utilized in the best way possible, on the basis of the further development of biosynthetic processes

or of organic synthesis. However, the important task of our workers, specialists and scientists in production and study and research centers is, along with providing these products in the country, to discover the most technically suitable and most economically profitable ways of using and processing them, by utilizing the existing production capacities or by creating new capacities. This is very urgent, especially in the textile and knitwear industries, so that, with the existing stock of machines and by carrying out the necessary adaptations, clothes with a mixture of wool and "terital" fibres, cloth with a mixture of cotton-polyester and so forth, will be produced not only to compensate for the lack of natural raw materials, but also to increase the range and quality of their products.

Natural relationships and dependency exist between techniques and technology. Under established conditions, they help in the development and perfection of each other. Therefore, it is essential that any improvement carried out in technology must be harmonized with the perfection of techniques and vice versa, both in the simplest production units and in the most complex workshops.

It is known that such advanced technological processes as, for example, the homogenizing of fruit juices or of food for breast-fed children, the compression of carbonic gas that is formed in the processes of fermentation, separated distillation, hydrogenization of vegetable oils, and the processes of thermofixation and of preshrinking and so forth cannot be implemented in the conditions of low technology with ordinary work means. Likewise, it would be paradoxical to apply out-moded technological processes to completely automatic lines. If such a thing is allowed, modern technology would be converted into an "ornament," stripped of its functional aspect; we would have unilateral and partial developments and disharmony which obstruct the synchronization of production processes and, consequently, the effectiveness of social work would not be elevated to the required level nor to the level of the existing possibilities. "There is no justification," Comrade Enver Hoxha teaches us, "for placing a modern machine or a modern line in a work place, and for an established operation, at a plant or at a unit, with high productivity, when it is not accompanied by new organization of work, by the level and culture of production and by the capacities of the other links, because, in these conditions, these links become a bottleneck with all the anomalies that stem from this."

This is why the perfection of techniques and technology and the introduction, on a broader and broader scale, of the latest achievements in production are closely linked to and directly dependent upon, among other things, the level of the management and of scientific organization of work.

It is a fact that, in some branches of light industry and the food industry there still is a disharmony between the pace in increasing production and the pace of improvement of techniques and technology. It is disturbing

that, in some branches of production, for example, in the canned fruit and vegetable, alcohol and cold drinks, and hide and shoes, ready made garments industries and so forth, of unified technological processes are not applied everywhere in all their enterprises although they have the same type of production, nor are the necessary efforts made to unify them, on the basis of the best achievements, studies, experiments and implementations on the industrial level; and, this negligence and carelessness is reflected in certain cases even when reconstructions, extensions and new constructions are carried out.

The technical bureaus and the study-design work groups in enterprises and research centers have not yet properly tackled this problem with all the necessary seriousness. In their study work and, especially when it comes to carry out their design and decision, not infrequently one can observe the tendency to choose the "shortest" way, the way that causes less trouble and which, in its exterior appearance, seems to be most "profitable," and copy the ones which is the simplest and the easiest to make without bringing any improvement to it at all; the fact that its technical, technological and economic-financial production indicators are low does not disturb them at all. Thus, for example, this is what was done in the food industry for the construction of some plants for milling flour, for the extraction of oils, for the production of sauce and for the drying of vegetables and so forth, instead of taking, as a model, the flour plants and the plants for the production and refining of sun-flower oil and for the extraction of sauce in Lushnje, Pler, Elbasan, Vlore and other districts, which have a more advanced technology and, later, on this basis, introducing the new elements of techniques and technology that have been achieved in the other countries.

A typical case of superficial study--the unsatisfactory results of which have not yet served as a lesson--is that of the extension of the vegetable drying industry. During the past 10 years, in accordance with the party guidelines for improving vegetable processing, drying lines have been built almost in every district of the republic, building them as near to the raw material as possible. Considering that in this field we had to deal with the beginning of a new production, it would have been very profitable for these lines to be designed and built on the basis of the most advanced techniques and technology, in accordance with the best requirements of production and of export. But, this was not done. Starting the easiest way, mistakes were made in the selection of technology. And, failing to draw lessons from the past mistakes, the routine continued and was repeated later on, when the need arose to improve the effectiveness of production in vegetable drying lines. Instead of making this improvement on the basis of the extension of the existing lines by bringing into them the most advanced elements of techniques and technology, that required less expenditures, new lines were built with the same technology within the same enterprise, repeating the same work operations and using the existing equipment and machinery.



As a typical example of this research work, technical, technological and organizational weakness, is the case of the "Ali Kelmendi" food processing combine in Tirana, where, within the past 6-7 years, 4 special lines for vegetable drying were built and put into operations one after the other, each having the same production capacities and the same techniques and technology, with 3-4 times more expenditures for their building and assembling and with as much expenditures for production, manpower and so forth. This problem could have been best solved when the task was assigned to double the production capacities on the basis of extending the technical-technological processing of the first line. But, this required more extensive studies, experiments and the use of advanced experience and advanced achievements in this field. However, had it been done in this way, not only would much less expenditure would have been needed for the reconstruction and expansion of the existing line, but also 90 percent of the duplicate operations could have been averted, the level of mechanization and of technology would have been improved and the production expenditures would have been decreased and the quality improved.

The reasons for these weaknesses is to be found not only in the insufficient efforts carried out by the party organizations and leadership organs of this enterprise to undertake and complete such a study, but also in the partial study and the failure to choose the best solution for this problem by the Institute for Chemical and Technological Research and the Institute of Construction Designs for the creation of the so-called "model line" for vegetable drying which was characterized not only by its partial mechanization of work processes, but also by the complete lack of opportunity for future expansion. The clear-cut "decisions" of the Executive Committee of the Tirana District People's Council and of the Ministry of Light Industry and the Food Industry have also influenced these new constructions, starting with the incorrect idea that "let us first overcome the situation, later we see and act."

The selection of a model for reproduction to replace an out-moded one, with limited production capacities and with low technical and technological indicators which, in its complex, creates a semi-artisan technical and organizational situation, with many work operations by hand, is the consequence of a superficial study work. The argument that they were made for constructive simplicity and for the urgent needs of production are groundless. Referring to these problems, Comrade Enver Hoxha stressed that "the passing from the artisan phase to the field of organization of work and production requires a broader conception and a more organized struggle. Today, this issue constitutes one of the great reserves for increasing production and labor productivity. The completion of studies and the adoption of concrete measures in this field are of great effectiveness and less expensive.

Undoubtedly, in the field of techniques and technology, the perfection of the organization of production is closely linked with the expansion of the technical and scientific revolution, because, new techniques



and technology can give the greatest results if they are used on the basis of a new, adequate organization of production.

In all these directions, always promoting techniques, technology and organization of production, a broad field of study and of implementing work is assigned to all elements of production and management at the grassroots and the center and to the scientific institutions, especially the Institute for Chemical-Technological Research. These problems must take the place they deserve in their themes, especially in the content of studies, designs or dissertations, because, it is in this way that their scientific value increases and the implementation of these studies becomes more useful for our socialist economy.

In all the cells of production and scientific research institutions the people have worked and are working to draw up the draft 1981-1985 Seventh Five-Year Plan. The fulfillment of the pressing tasks that are stipulated in the field of increasing the production of consumer goods at a high pace will further increase the mobilization and feeling of responsibility of the workers of light industry and the food industry toward the people and the party in order to tackle the expansion of the technical and scientific revolution with increased forces, for the implementation of the tasks linked with the satisfaction, better and better, of the increasing needs of the people and the economy with consumer goods, in the necessary quantity and assortment, less expensively and with higher quality.

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## TWO YEARS OF ECONOMIC EXPERIMENT EVALUATED

Prague STATISTIKA in Czech No 7, 1980 pp 289-297

[Article by Jaroslav Vacha, Federal Office of Statistics, Prague: "The Second Year of the Experiment in the Management of Efficiency and Quality in Industry"]

[Text] 1. Evaluation of the Results of the Experiment for 1979

In 1979 the Comprehensive Experiment In Efficiency and Quality Management was carried out under economic conditions markedly different from those of the preceding period.

The shortages of electric power experienced in 1979 were the major reason for production shortfalls and the resulting failure to fulfill production plans throughout the industry.

At the beginning of the second year of the experiment the VHJ's participating in the experiment had to deal with substantially more demanding economic tasks since the production shortfall was reflected in other areas, smooth the flow of supplier-customer relations was, in particular, being affected.

Production shortfalls resulted from these causes in all the VHJ's participating in the experiment, but in the course of the year the majority of the VHJ's were able to make them up. Consequently, the unfavorable situation with respect to the formation of resources at the beginning of the year had only a partial effect on the annual results and was evident only in a somewhat lower fulfillment of the plan in the areas of economic results and marketing as against 1978. The plan for the basic indicators of efficiency and quality was, however, not affected.

In this direction, the experiment indicated that its rules make it possible, even under difficult economic conditions, to respond more rapidly to problems as they arise and handle possible difficulties that may occur and, in some cases, to limit their adverse effect on management.

The focal point of the experiment in verifying the new system of plan indicators is the financial indicators with return on production assets leading the list.

The VHL's participating in the experiment are devoting special attention to fulfilling the plan for this indicator, since it is also the major criterion for the wage incentive system.

In 1979, 10 of the 12 VHL's participating in the experiment surpassed the planned level of return on production assets. Overall, the planned profitability was exceeded by 3.5 percent.

The creation of profit played an important role in fulfilling and exceeding the plan for return on production assets.

In 1979, 10 of the VHL's in the experiment exceeded the planned profit, overall fulfillment was 103 percent, the creation of profit rising 19.1 percent over 1978. The planned profit was exceeded by those VHL's in the experiment that focused to a greater extent on innovations in production, primarily as a result of preferential pricing.

Table 1. Evolution and Fulfillment of the Plan with Respect to Selected Indicators for the VHL's in the Experiment for 1978 and 1979

	Měrová jednotka (1)	Provádění plán 1979 (2)	Skutečnost 1979 (3)	% plnění plánu 1979 (4)	% plnění plánu 1979 (5)	Index 1979- 1978 (6)	Index 1979- 1977 (7)
Vlastní výkony (6)	mil. Kčs	41 563	42 282	101,7	102,2	107,8	108,0
Hrubá výroba v cenách k 1.1. 1977 (7)	mil. Kčs	98 020	98 448	100,3	100,7	104,8	106,0
Finální odbyti celkem (8)	mil. Kčs	37 376	38 370	102,7	104,7	105,4	108,2
Objem dodávek ve VC pro: (9)							
- investice (10)	mil. Kčs	4 017	4 639	115,2	126,3	100,6	118,7
- vnitřní obchod (11)	mil. Kčs	11 292	11 362	100,6	101,1	104,2	109,5
- vývoz do SZ (12)	mil. Kčs	12 658	12 881	101,8	104,8	105,3	103,5
- vývoz do NSZ (13)	mil. Kčs	9 409	9 498	100,9	100,8	109,7	108,4
Průměrný evidenční počet pracovníků (14)	osoby	430 951	430 782	100,0	99,7	100,9	100,7
Produktivita práce s vlastních výkonů (15)	Kčs	96 565	98 274	101,8	102,5	106,8	107,3
Produktivita práce s hrubé výroby (16)	Kčs	227 460	228 533	100,5	101,0	104,0	105,3
Průměrná měsíční mzda pracovníků (17)	Kčs	2 568	2 586	100,7	100,6	103,5	103,4
Rentabilita k výr. fondům (18)	%	10,84	11,22	103,5	106,7	x	x
Rentabilita k nákladům (19)	%	13,73	14,18	103,3	106,0	115,5	114,1
Podíl celkových nákladů na upravených výkonech (20)	%	87,99	87,66	99,6	99,7	98,4	98,8
Podíl materiálových nákladů na upravených výkonech (21)	%	65,81	65,71	99,8	99,5	98,5	98,0
Zisk (22)	mil. Kčs	12 791	13 177	103,0	106,1	119,1	119,2

[Key to Table 1]

- (1) Unit of measurement
- (2) Implementation Plan, 1979
- (3) Actual, 1979
- (4) Fulfillment of the 1979 plan, in percent
- (5) Fulfillment of the 1978 plan, in percent
- (6) (Labor) value added
- (7) Gross output at 1 January 1977 prices
- (8) Total final sales
- (9) Volume of supplies at whole prices for:
- (10) Investment
- (11) Domestic trade
- (12) Export to socialist countries
- (13) Export to nonsocialist countries
- (14) Actual average number of workers
- (15) Personnel
- (16) Labor productivity based on value added
- (17) Labor productivity based on gross output
- (18) Average monthly wages
- (19) Return on production assets
- (20) Return relative to expenditures
- (21) Percentage of total costs to adjusted output
- (22) Percentage of material costs to adjusted output
- (23) Profit

All aspects of this type of price incentives were fully taken advantage of by 11 of the VHJ's in the experiment whose number of preferentially priced items increased over last year. Overall the advantage derived from preferential pricing in 1979 reached Kcs 810 million, or 45.6 percent more than in 1978.

The greatest advantage of preferential pricing was achieved by the participating VHJ's under the CSR Ministry of Industry, namely Vlnarsky Prumysl Brno, Kcs 305 million, and Pisek Pletarsky Prumysl [Knitting Industry], Kcs 139 million. In VHJ's in the engineering industry these include the Tovarny Strojireske Techniky in Prague, Kcs 120 million, and Zavody Vseobecneho Strojirenstvi in Brno, Kcs 76 million.

On the other hand, the amount under penal price reductions dropped Kcs 4 million from the 1978 figure, and amounted to only Kcs 18 million.

In addition to preferential pricing, the creation of profit was also affected by costcutting, primarily at those participating VHJ's that as a consequence of less innovation were not authorised the greater number of preferentially priced items.



The ratio of total costs to adjusted output achieved was 0.33 of a point lower than the annual implementation plan figure and 1.47 points lower than the actual figure for 1978. At the same time, the proportion of material costs in adjusted output was also 0.10 of a point lower than the annual implementation plan and 1.000 points lower than the actual figure for 1978.

A total of nine participating VHJ's had better results in terms of costs than assumed by the annual implementation plan.

For individual VHJ's participating in the experiment, the level of return on production assets was also influenced, to a lesser degree, by the conditions of inventories and fixed assets.

For inventories the situation was not very favorable, since only at half the VHJ's was the inventory turnover time reduced by 1 to 4 days, while in the other half, inventory turnover was by 1 to 4 days slower.

The return on fixed assets developed more favorably, for at nine of the VHJ's the indicator was better than envisioned by the plan, at two it was the same as called for by the annual plan, and at only one of the VHJ's was it worse than the plan.

An important place in the new system of plan indicators being tested in the experiment is occupied by the value added indicator, which plays an important role not only in lowering the material intensiveness of production, but also is an important motivator in the area of wage incentives.

The annual implementation plan for (labor) value added was surpassed by 10 of the VHJ's, and the other 2 fulfilled the indicator by 99 percent. Overall, the VHJ's exceeded their plan with respect to (labor) value added for 1979 by 1.7 percent, and the fact that this indicator was met to a greater extent than that for gross output (100.4 percent) indicates that this indicator is fulfilling its role in lowering the material intensiveness of production.

Exceeding the plan in return on production assets and (labor) value added and other indicators for the marketing structure, which decisively motivate the formation of the wages payable, made it possible for the majority of VHJ's in the experiment to draw wages without affecting their relation to labor productivity.

The plan for the labor productivity with respect to value added was exceeded overall by 1.8 percent, while the plan for average wages was exceeded by only 0.7 percent. In comparison with 1978 the productivity of labor rose by 6.8 percent, and average wages by 3.5 percent.

The plan for the basic component of the wage bill was fulfilled by 99.9 percent and its norm of 25.5 percent was 0.47 point lower than the plan, since it was exceeded by only 1 VHJ.

The proportion of the incentive component in the total wages payable was, in accordance with the objectives of the experiment, increased 1 point from the 1978 figure, to 19.6 percent. To be sure, the plan for the absolute limit on the incentive component of the wage bill was exceeded by nine VHI's, but of these, five VHI's did this while exceeding the plan for all of the qualifying indicators.

A total of 11 of the participating VHI's adhered to the mandatory limit on their wages payable, and with the savings amounting to Kcs 208 million, they created additional resources for implementing a longer-range wage policy.

The lower plan fulfillment in the creation of material resources primarily affected the area of utilization and was reflected in the results achieved by a lower fulfillment of the plan than in 1978, both in total final sales and in general trade trends, except for exports to nonsocialist countries at wholesale prices. Just as happened in 1978, throughout the industry, in the utilization trend of industrial production, the fulfillment of tasks set by the annual implementation plan also continues to be uneven, in the sense that the plan for deliveries of machinery and equipment for investments continues to be overfulfilled (by 15.2 percent), while deliveries for the domestic trade sector are fulfilled only by 100.6 percent, those for export to socialist countries by 101.8 percent and those for export to nonsocialist countries by 100.9 percent.

For the effectiveness of export as measured by comparative indicators, better overall results in 1979 were achieved for fulfilling the plan for export to nonsocialist countries (104.4 percent) than for exports to socialist countries (99.2 percent).

Fulfilling the plan for sales and especially for deliveries for export is ever more dependent on the rapid realization of the results of research in practice in the form of innovations while simultaneously improving the overall quality of products. Consequently, special attention is devoted to these areas, which shows up in the fulfillment of the plan for the basic indicators characterizing the area of innovation which indicate that the development of innovation effort in the majority of the VHI's participating in the experiment shows a rising trend.

The planned share of new products in the production of goods was exceeded by all VHI's in the experiment except for the VHI Drevarsky a Nabytkarsky Priemysel in Zilina.

The planned share of new prime quality and technologically advanced products in the volume of new products was likewise exceeded by all the VHI's for which it was prescribed in the experiment and all of them achieved a higher share than in 1978. In comparison with the figures for all of industry in 1978 (14.1 percent) and for the first 3 quarters of 1979 (15.5 percent), 9 of the VHI's in the experiment achieved better results for this indicator.

Table 2. Plan Fulfillment and the Development of the Innovations Indicators  
(in percent)

VHJ	Podíl objemu nových výrobků a výrobků sbliž (13)			Podíl objemu nových výrobků I. stupně jakosti a technologicky pokročilých z objemu nových výrobků (14)			Podíl objemu nových výrobků technicky na světové úrovni z objemu nových výrobků (15)		
	plán na rok 1979 (16)	skutečnost 1979 (17)	skutečnost 1978 (18)	plán na rok 1979 (16)	skutečnost 1979 (17)	skutečnost 1978 (18)	plán na rok 1979 (16)	skutečnost 1979 (17)	skutečnost 1978 (18)
	(16)	(17)	(18)	(16)	(17)	(18)	(16)	(17)	(18)
Hutní druhovýroba, Praha (1)	3,0	3,3	2,9	8,0	20,5	8,2	50,0	53,6	47,4
SIGMA, Olomouc (2)	17,4	20,0	19,9	52,1	54,2	49,0	25,4	52,2	11,8
Továrny strojírenské techniky, Praha (3)	19,0	23,1	21,6	39,2	52,3	37,9	—	14,2	22,1
Závody všeobecného strojírenství, Brno (4)	16,0	20,8	20,3	44,5	53,3	45,1	45,0	53,7	46,8
ELITEX, Liberec (5)	16,5	16,8	14,2	4,3	9,3	5,7	4,3	9,3	5,7
Čs. závody gumárenské a plastické, Gottwaldov (6)	7,7	12,3	9,2	10,5	25,0	9,1	—	6,8	2,8
Pletářský průmysl, Písek (7)	12,0	19,7	13,2	17,0	24,6	19,5	23,0	27,3	19,3
Vlnářský průmysl, Brno (8)	21,0	25,1	24,4	24,0	20,1	27,4	24,0	20,1	27,4
Průmysl kožené galanterie, Hradec Králové (9)	23,7	26,9	21,9	4,7	6,1	3,6	1,0	1,5	0,7
Slovchemia, Bratislava (10)	4,2	11,1	8,6	—	21,0	17,5	—	17,7	9,3
OGAKO, Partizánské (11)	47,9	48,4	47,9	0,6	1,2	0,7	—	0,3	—
Dřevářský a nábytkářský průmysl, Žilina (12)	12,9	14,6	16,5	0,1	30,3	8,8	—	—	—

Key:

- (1) Hutní Druhovýroba, Prague
- (2) SIGMA, Olomouc
- (3) Továrny Strojírenské Techniky, Prague
- (4) Závody Všeobecného Strojírenství, Brno
- (5) ELITEX, Liberec
- (6) CS Závody Gumárenské a Plastikarské, Gottwaldov
- (7) Pletářský Průmysl, Písek
- (8) Vlnářský, Průmysl, Brno
- (9) Průmysl Kozene Galanterie, Hradec Kralove
- (10) Slovchemia, Bratislava
- (11) OGAKO, Partizánske
- (12) Drevarský a Nabytkarský Priemysel, Zilina
- (13) Ratio of new products in the production of goods by volume
- (14) Ratio of first quality and technologically advanced goods to the volume of new products by volume
- (15) Ratio of new products at world standard of technology to the new products by volume
- (16) Plan for 1979
- (17) Actual, 1979
- (18) Actual, 1978

The plan for the ratio of new products at the world standard of technology in the volume of new products was prescribed for seven of the VHJ's in the experiment, all of which exceeded it. In comparison with 1978, there was a decrease in this ratio only in the VHJ Tovarny Strojirenske Techniky in Prague.

Equally promising are the results achieved in plan fulfillment and in the development of other indicators of innovation, namely the "ratio of sales collection stock replacement" and the "share of products of a high quality standard and style level in total sales, at wholesale prices." These indicators characterize the specific innovating process in the branch of the consumer goods industry; they were prescribed for the experiment's three VHJ's under the CSSR Ministry of Industry.

Further improvement was also achieved in the area of quality for that part of the production of the experimenting VHJ's that is evaluated by state testing stations.

Table 3. Plan Fulfillment and Development of Quality Indicators

	Experimentující VHJ (3)			Průmysl celkem (6)	
	plán 1979 (4)	skutečnost (5)		Skutečnost 1.-3. čtvrtletí (7) 1979	Rok 1978 (8)
		1979	1978		
Podíl výroby zboží I. stupně jakosti z objemu výroby zboží hodnoceného státními zkouškami v % (1)	21,0	27,6	22,9	23,2	21,9
Podíl výroby zboží zařazeného státními zkouškami do I. stupně jakosti z celkového objemu vyrobeného zboží v % (2)	5,9	8,4	6,4	5,3	5,0

Key:

- (1) Ratio of production of first quality goods from the output of goods evaluated by state testing stations, in percent by volume
- (2) Ratio of the goods production assigned by the state testing stations to the first quality category to the total volume of goods produced, in percent
- (3) The experimenting VHJ's
- (4) Plan, 1979
- (5) Actual
- (6) Industry as a whole
- (7) Actual, first 3 quarters of 1979
- (8) Year, 1978

Despite the still limited capacity of the state testing stations, the number of products and thus the volume of the output of goods tested continued to rise, so that in 1979 it amounted to Kcs 29.9 billion, which is nearly 30 percent of the output of goods of all the VHJ's in the experiment.



Table 4 Plan Shortfalls in Selected Indicators by VHJ for 1978

Název ukazatele (23)	(24) VHJ číslo (1)											
	1	2	3	4	5	6	7	8	9	10	11	12
1 Všechní výkony					98,9							98,9
2 Hrubá výroba v cenách k 1. 1. 1977											98,4	98,7
3 Výroba zboží ve VC												
4 Podíl VZ odvozených do 1. stupně jakosti VZ celkem											98,4	99,0
5 Podíl objemu v výrobě výrobků z VZ celkem												
6 Podíl objemu nových výrobků z 1. stupně jakosti a technicky pokročilejších z objemu nových výrobků												
7 Objem dodávek ve VC pro — investice — vnitřní obchod — vývoz do SZ — vývoz do NSZ					96,4 96,4 96,1 88,9		99,2 99,2			94,2 94,2 96,2 96,1	98,8 98,8 98,9 98,1	
8 Rozdílový ukazatel objemu dodávek pro vývoz do SZ		94,8	97,3	96,3	98,3							98,2
9 Rozdílový ukazatel objemu dodávek pro vývoz do NSZ		99,7	98,9		88,7						98,3	
10 Limitní investice celkem												
11 Objem prací a dodávek pro stavby nad 1 mil. Kč	87,4		96,4		73,5		82,2	81,8		89,1	72,8	91,8
12 Průměrný evidenční počet pracovníků	99,3				99,7		99,3	99,8	99,9		99,9	
13 Produktivita práce a vstoupů výkonů												98,8
14 Produktivita práce a hrubé výroby				99,9								98,7
15 Průměrná měsíční mzdová průměrnost		99,3										
16 Rentabilita k výrobě investic	99,4 99,7									98,6 98,9 98,8		
17 Rentabilita k nákladům												97,1
18 Doba obrátu zásob		96,7	98,3					96,1				
19 Podíl celkové výroby na opravených výkonech	100,0	100,0								100,2		
20 Podíl materiálových nákladů na opravených výkonech	100,2	100,6								101,3		
21 Výkonnost nákladních pro- středků										99,9		
22 Zisk	99,5									98,8		

\*The numbers of the VHJ's correspond to the names of the VHJ's according to the order given in the key to Table 2.

## Key:

- (1) (Labor) value added
- (2) Gross production at prices of 1 January 1977
- (3) Production of goods at wholesale prices
- (4) Ratio of tested goods qualifying as prime grade overall
- (5) Ratio of new products in overall production
- (6) Ratio of new goods of prime grade and of technologically advanced products in overall production
- (7) Deliveries at wholesale prices for
- (7a) Investments
- (7b) Domestic trade
- (7c) Exports to socialist countries
- (7d) Exports to nonsocialist countries
- (8) Comparative indicator of deliveries for exports to socialist countries
- (9) Comparative indicator of deliveries for exports to nonsocialist countries

[key continued]

[continuation--Table 4 key]

- (10) Fixed-limit investments as a whole
- (11) Volume of work and deliveries for construction projects at over Kcs 2 million
- (12) Average recorded number of workers
- (13) Labor productivity based on value added
- (14) Labor productivity based on gross output
- (15) Average monthly wages
- (16) Return production assets
- (17) Profitability based on costs
- (18) Inventory turnover
- (19) Ratio of total costs to adjusted output
- (20) Ratio of material costs to adjusted output
- (21) Return on fixed assets
- (22) Profit
- (23) Type of indicator
- (24) Number of the VHJ\*

The volume of recognized claims, which reflect the overall level of quality, declined 13 percent from 1978.

While the overall results achieved by the experimenting VHJ's are positive in most of the areas checked, the fulfillment of the plan in individual VHJ's differed and reflected in more pronounced ways the specific conditions of the production and replacement processes.

All of the experimenting VHJ's fulfilled or surpassed their plans for selected indicators only in the areas of innovation and quality, and the newly introduced fixed-limit investment indicator, which was introduced in the experiment and which the VHJ's used primarily for modernizing their production bases. On the other hand, the largest number of VHJ's (eight) failed to fulfill their planned volume of work and deliveries for building projects budgeted at over Kcs 2 million due to insufficient construction capacity.

The best results in fulfilling the plans in 1979 were achieved by the VHJ's of the CSR Ministry of Industry. The engineering VHJ's under the Federal Ministry of Metallurgy and Heavy Engineering fell short of plans in the area of financial management, and the engineering VHJ's in the Federal Ministry of General Engineering did not attain the planned levels in exports to both socialist and nonsocialist countries. The VHJ Elitex additionally failed to fulfill export and domestic market deliveries.

## 2. Evaluation of the Results from the Beginning of the Experiment

The 2 years that have passed since the experiment was begun make it possible to test another element based on the cumulative evaluation of the results achieved in fulfilling the plan.

The basic tendencies in plan fulfillment by the experimenting VHL's, which first appeared in 1978, continue essentially unchanged in the cumulative results. The aggregates also show the favorable plan fulfillment in financial indicators, cost reductions, and the differentiated fulfillment in the major sales areas. Because the cumulative monetary incentives are based, in a number of indicators, on actual results achieved not only in the implementation but in the original plan aggregates as well, the significance of the long-range nature and the stability of the plan are also improving. In this connection, it is noted that realizing the principle of long-range planning and the stability of plans in 1978 and 1979 was not without its problems, since a number of changes from the original plan were made in the implementation plans.

Table 5. Cumulative Plan Fulfillment in Selected Indicators for 1978 and 1979

Ukazatel (1)	Měrová jednotka (14)	Plán (15)	Skutečnost (16)	% plnění plánu (17)
Dodávky ve VC pro (2)				
- investice (3)	mil. Kčs	7 718	9 305	120,6
- vnitřní obchod (4)	mil. Kčs	22 052	22 239	100,8
- vývoz do SZ (5)	mil. Kčs	25 012	25 763	103,0
- vývoz do NSZ (6)	mil. Kčs	17 997	18 159	100,9
Rozdílový ukazatel vývozu do SZ (7)	%	130,2	129,7	99,6
Rozdílový ukazatel vývozu do NSZ (8)	%	102,8	103,7	100,9
Vlastní výkony (9)	mil. Kčs	80 111	81 675	102,0
Podíl celkových nákladů na upravených výkonech (10)	%	89,02	88,59	99,5
Podíl materiálových nákladů na upravených výkonech (11)	%	66,53	66,33	99,7
Rentabilita k výrobním fondům (12)	%	9,92	10,40	104,8
Visk (13)	mil. Kčs	22 969	23 972	104,4

Key:

- (1) Indicator
- (2) Deliveries at wholesale prices
- (3) Investment
- (4) Domestic trade
- (5) Exports to socialist countries
- (6) Exports to nonsocialist countries
- (7) Comparative indicator of exports to socialist countries
- (8) Comparative indicator of exports to nonsocialist countries

- (9) (Labor value added)
- (10) Ratio of total costs to adjusted output
- (11) Ratio of material costs to adjusted output
- (12) Return based on production assets
- (13) Profit
- (14) Unit of measurement
- (15) Plan
- (16) Actual
- (17) Fulfillment of plan (percent)

Table 6. Survey of Differences Between Original and Implementation Plans for Selected Indicators in the Experiment for 1978 and 1979

Název ukazatele (1)	VHJ číslo <sup>1)</sup> (16)											
	1	2	3	4	5	6	7	8	9	10	11	12
Objem dodávek ve VC pro: (2)												
- investice (3)		+	+			-	+	+	+	+		
- vnitřní obchod (4)		+	+	-	-	+	+	+	+	-	-	-
- vývoz do SZ (5)		+	-	+		+		+	-	+	+	+
- vývoz do NSZ (6)		+	-	-	-	-	-	-	-	+	-	-
Rozdílový ukazatel dodávek pro vývoz do SZ (7)	-	+	-	+	+	-	+	+	+	+	+	+
Rozdílový ukazatel dodávek pro vývoz do NSZ (8)	+	+	+	-	-	-	+	+	+	+	+	+
Vlastní výkon (9)		-	+	+	+	+	+	+	+	+	+	-
Zisk (10)		-	+	+		+	+	+	-	+	+	-
Rentabilita k výrobním fondům (11)		+	+	+		+	+	+	-	+	+	+
Podíl celkových nákladů na výkonech bez vlivu zahraničního obchodu (12)		+	+	+		+	+	+	+	+	-	-
Podíl materiálních nákladů a služeb materi- álních povahy bez podílu ZP a vlivu zahra- ničního obchodu na výkonech (13)		+	+	+	-	+	+	+	+	+	+	+
Výstřednost ZP (14)		+		-			+					+
Doba obrátu zásob (15)	-	+	+	-		-	+	+	-	+	+	

1) The numbers of the VHJ's correspond to the names of the VHJ's in the key to Table 2.

+ increase in the implementation plan as against the original plan

- decrease in the implementation plan as against the original plan

Key:

- (1) Name of indicator
- (2) Deliveries at wholesale prices for:
- (3) Investment
- (4) Domestic trade
- (5) Exports to socialist countries
- (6) Exports to nonsocialist countries
- (7) Comparative indicator of deliveries for exports to socialist countries
- (8) Comparative indicator of deliveries for exports to nonsocialist countries
- (9) (Labor) value added
- (10) Profit
- (11) Return based on production assets
- (12) Ratio of total costs to output less the effect of foreign trade
- (13) Ratio of costs of materials and services of a material nature less fixed asset depreciation and effects of foreign trade on output
- (14) Return on fixed assets
- (15) Inventory turnover
- (16) VHJ number <sup>1)</sup>



Overall, the implementation plan of the VML's in the experiment differed in 128 instances, of which 90 represent an increase over the original 3-year plan (for the experiment), and 38 a reduction in it.

The greatest number of instances of tightening up plans resulted from the experimenting VML's taking advantage of the opportunity at as early a stage as the compilation of the plan, to raise the volume of their wages payable by accepting higher plan requirements for value added and return on production assets than had been set for them by the branch breakdown. Thus, the planned requirements for a return on assets were increased by nine VML's and for value added by eight VML's.

Since the system of plan indicators is an interrelated one, it necessitated modifications in the plan for other indicators, primarily the plan for costs and some areas of sales.

Reductions in implementation plans from the original 3-year plan were made most frequently in the area of sales, chiefly for export deliveries to nonsocialist countries.

### 3. The Results of VML's Participating and Not Participating in the Experiment

A comparison of the results achieved in plan fulfillment by the VML's participating in the experiment, and in the 1979 developments, with the results achieved by a group of VML's under the Federal Ministry of Metallurgy and Heavy Engineering, the Federal Ministry of General Engineering and the Ministries of Industry of the GDR and the DDR not in the experiment shows that for the most part better results were achieved by the VML's participating in the experiment.

The total sales plan even by economic standards was exceeded by experimenting VML's to a greater degree than by those not participating. Their export effectiveness, as measured by the comparative indicator, was higher for exports both to socialist and to nonsocialist countries.

The experimenting VML's also achieved a two-point higher plan fulfillment in return on production assets and profits than did the VML's not in the experiment. A cumulative comparison of the results for the 2 years of the experiment shows approximately the same tendencies.

### Conclusions

The second year of the experiment in efficiency and quality management in 12 industrial VML's further confirmed, in the majority of cases, the beneficial effect of the new economic tools used to increase efficiency and quality and tested the effects of certain other new elements.

Table 7. Selected Indicators for VHJ's Participating and Not Participating in the Experiment Under the Federal Ministry of Metallurgy and Heavy Engineering, the Federal Ministry of General Engineering and the Ministries of Industry of the CSR and the DDR for 1979

Název ukazatele (1)	Mírová jednotka (17)	Experimentující VHJ celkem (19)			Neexperimentující VHJ celkem (20)		
		Skuteč- nost (21)	% plánu (22)	index (23)	Skutečnost (21)	% plánu (22)	index (23)
Objem dodávek ve VC pro: (2)							
- investice (3)	mil. Kčs	6 629	115,2	100,6	31 049	111,1	102,3
- vnitřní obchod (4)	mil. Kčs	11 362	100,6	104,3	31 451	98,5	103,0
- vývoz do SZ (5)	mil. Kčs	12 881	101,8	105,3	66 832	100,2	105,0
- vývoz do NSZ (6)	mil. Kčs	9 698	100,9	109,7	27 646	97,3	103,3
Rozdílový ukazatel dodá- vek pro vývoz do SZ (7)	%	131,8	99,2	103,2	121,4	100,1	104,0
Rozdílový ukazatel dodá- vek pro vývoz do NSZ (8)	%	110,8	104,4	115,8	110,2	107,3	116,9
Hrubá výroba (9)	mil. Kčs	98 648	100,4	104,8	327 924	100,2	104,4
Průměrný evidovaný počet pracovníků (10)	fyz. osoby	430 782	100,0	100,9	1 576 030	100,4	100,7
Průměrná měsíční mzda pracovníka (11)	Kčs	2 586	100,7	103,5	2 649	99,7	102,7
Produktivita práce na pra- covníka (a hrubé výroby) (12)	Kčs	228 533	100,5	104,0	208 069	99,8	103,6
Zisk (13)	mil. Kčs	13 177	103,0	119,1	41 540	101,0	111,5
Stabilita k výrobním fondům (14)	%	11,22	102,5		9,33	101,5	.
Podíl celkových nákladů na výkonech bez vlivu zahraněčního obchodu (15)	%	87,66	99,6	98,4	88,79	99,9	99,0
Podíl materiálních nákladů a služeb nemateriálních povahy bez odpisů ZP (16)							
a vlivu zahraničního ob- chodu na výkonech bez vlivu zahraničního ob- chodu	%	65,71	99,8	98,5	66,03	99,5	99,0

Key:

- (1) Type of indicator
- (2) Deliveries at wholesale prices for:
- (3) Investments
- (4) Domestic trade
- (5) Exports to socialist countries
- (6) Exports to nonsocialist countries
- (7) Comparative indicator of exports to socialist countries
- (8) Comparative indicator of export deliveries to nonsocialist countries
- (9) Gross production
- (10) Average recorded number of workers
- (11) Average monthly wages
- (12) Labor productivity per worker (from gross output)
- (13) Profit

- (14) Return based on production assets
- (15) Ratio of total costs to output, less the effect of foreign trade
- (16) Ratio of costs of materials and services of a nonmaterial nature, less fixed asset depreciation and the effect of foreign trade in output
- (17) Unit of measurement
- (18) individuals
- (19) VNI's participating in the experiment, as a whole
- (20) VNI's not participating in the experiment, as a whole
- (21) Actual
- (22) Percentage of plan fulfillment

The basic trends in the management of the experimenting VNI's which showed up as early as 1978, continued essentially unchanged in 1979. The rules of the experiment continued to exert a favorable influence primarily on the further improvements in efficiency in the area of financial management, and significantly bolstered efforts at innovation and increase in the quality of production.

The results of the experiment have not yet become clearly evident in the area of foreign relations.

The cumulative evaluation of plan fulfillment for the 2 years of the plan in essence confirms the conclusions of the annual evaluations. The improved results achieved in plan fulfillment in 1978 over 1979 bettered the cumulative plan fulfillment for the 2 years and thus created a higher basis for monetary incentives tied to the cumulative data than was the case in 1979.

On the whole, the results of the experiment in efficiency and quality management can be evaluated as positive for the second year as for the first, proof of which is that a number of its tested new elements were incorporated by the Set of Measures for Improving the System of Planned Management of the National Economy after 1980.

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SLOVAK DEPUTY MINISTER DEFINES AGRICULTURAL TARGETS

Prague HOSPODARSKE NOVINY in Czech 22 Aug 80 pp 1,4

[Article by Eng Julius Medved, CSc, first deputy minister of Agriculture of the SSR]

[Text] The rise of material expenditures per unit of production and the decrease of *khozraschot* profitability have been clearly evident for a considerable time now, even after the completion of the restructuring of our agriculture, undoubtedly as the result of lack of progress in raising productivity and of the relatively low technical and economic standard. Compared with the world standard achieved in science and technology, the material input into intensification and replacement in our agriculture is characterized by a number of elements slowing down the improvement of the technical and economic indicators of means of production. Elements or systems of a revolutionary nature which could mean the introduction of innovations of a higher order in biology, chemicalization, methodology and technology appear only exceptionally and, most importantly, the coordination of these mutually connected elements of scientific and technical progress, which is indispensable given the specific biological-technical nature of agricultural production, manifests serious shortcomings.

Practically only our cereal production, specifically the densely sown cereal cultures, have reached a standard comparable to that of countries with developed intensive agriculture. Our research and improvement stations have already produced wheat seedstock yielding 8 to 9 tons per hectare, and barley yielding 6 to 7 tons per hectare, and seedstock improved in other countries is also available to us. Overall, fertilization, weed control and also mechanization of our cereal cultures exhibit a high standard.

Also results of the hybridization program in pig raising which yielded breeds with potential weight gains of between 600 and 650 grams per day in animals raised for slaughter, and which exhibit a higher proportion of meat and good feed conversion, approach the standard of highly developed agricultural countries. Also the results achieved in poultry raising are comparable with the world standard. But in both these animal productions sectors nutrition, raising techniques and technological production systems are not equal to the biological potential of the animals.



## The Call for New Criteria

Certain advanced elements of scientific and technical progress which must be evaluated in terms of the current world standard could be introduced also in the exploitation of the bioenergetic soil potential, feedstuffs, oil-bearing crops and a number of other crops, and in cattle and sheep raising. But all these sectors or production branches are characterized by lack of comprehensiveness of scientific and technical progress, and a lack of balance of biological, technical and technological elements over the entire production cycle. The process of industrialization in our agriculture and its material tools exhibit many elements characterizing extensive agriculture and low quality, while also the intensification and productivity-raising means, such as chemical fertilizers, mechanical means for technological field operations, animal husbandry, transportation and manipulation of bulk supplies and building materials are being produced (with a few exceptions) at high cost and with high material and power input. Frequently in agriculture the use of these means does not result in a commensurate saving of human labor. A contributory factor in the overall low technical and economic standard of means of production in this sector is also, for either technical or economic reasons, the inability of using rationally a number of machines and means of transport, and technological installations and materials under difficult natural conditions.

Such a critical assessment of the technical and economic standard of our agriculture is justified mainly because existing and prospective conditions governing overall economic growth in our country place qualitatively more exacting requirements on agriculture, the direction and ways of its development and its support base, which calls for the application of new criteria in assessing achievements and the setting of new objectives and tasks. We must respect more than we have until now the harsh reality that limiting factors such as the immutable acreage of the land area are being further complicated by the fuel and energy shortage, water supply and pollution problems which also affect agriculture, the problem of industrial emissions, the supply of raw materials and technological equipment for fertilizer production and the production of pesticides. In addition, chemicalization of agricultural production and large-scale animal production methods render protection of the environment more difficult and aggravate the shortage of labor.

Under these increasingly difficult conditions augmenting the degree of self-sufficiency in foodstuffs and some other agricultural crops used in industry is possible primarily only by intensifying and accelerating the implementation of scientific and technical progress.

Sometimes the question is being asked whether in fostering self-sufficiency priority should be given to the resulting intensification of agricultural production or to the greatest possible reduction in expenditures per unit of production which is usually stressed in connection with the endeavor to raise the economic efficiency of agricultural production. Naturally,

intensification of production, albeit differentiated according to soil, climate and overall production conditions prevailing in individual oblasts and enterprises, is the only available alternative.

Therefore, the rational answer in getting at the root of the above problem should not be continued intensification of production by increasing chemicalization, mechanization, etc. to raise soil fertility, but finding ways of reducing the material, power and labor requirements while maintaining the socially necessary production structure and intensity. From this it follows that in agriculture as well, the term objectively progressive in the economic sense is not just an scientific and technical means which will increase output and labor productivity, but also those means likely to save materials, power and labor. In this connection it is worth mentioning that the cost of many material elements of scientific and technical progress, especially of mechanical equipment and construction materials, is not commensurate with the production gain achieved, but that also in this way agricultural production can also only be rendered costlier.

#### Plant Production

A priority task in research, but also in the field of application of proven scientific findings, is mastering the problems connected with increasing crop production by raising soil productivity as the basic condition of all agricultural food production and of raw materials for many branches of the consumer goods industry.

Abiding by the necessary water supply regime and the correct supply of nutrients primarily by increasing the doses of chemical and natural fertilizers, choosing crop-growing localities with optimal production conditions, and applying scientifically proven planting procedures to exploit individual soils and ecological conditions to best effect, occupies a key position in this area. Calculations based on research and the results achieved by advanced methods applied in practice reveal that irrigation raises crop yields by 25 to 30 percent, and soil drainage by 15 to 20 percent on the average. Therefore, the SSR long-term improvement program includes a vast construction program of irrigation and soil drainage installations. In the coming 5 years the guidelines for the Seventh Five-Year Plan call for the preparation of a program to extend the area of land under irrigation by 120,000 hectares by 1985, and draining a land area 90,000 hectares in size.

Today, primarily the rational use of chemical fertilizers is in the forefront of efforts to raise soil fertility. Results acquired both in research and practice reveal that chemical fertilizers applied on the basis of exact analytical determination of supplemental requirements of crops can raise the production increase due to fertilizer application by 15 to 20 percent over localities where this practice is not followed. One of the most important tasks in the activity of agrochemical enterprises is applying scientific and technical findings in the use of chemical fertilizers, and progressively also of manure, is to exploit as soon as possible this large reserve production potential. In accord with the resolutions of the 13th CPCZ Central Committee Plenum.

Also worthy of consideration is the finding that productivity of our land can be increased by approximately 25 percent by intensive exploitation of the bioenergetic potential of the soil by maximum improvement of its organic component through fertilization and the choice of crop production structure and crop rotation practices which most benefit the upkeep and fostering of soil fertility. Of course, raising soil fertility by cultivating the most suitable crops and application of the right methods conflicts in practice with other important considerations which have to do with the geographical distribution and structure of crop production.

Several crops are so important that they must be grown regardless of their "fertilizing effect," frequently also under less suitable soil and weather conditions. In the case of other crops the important factor which must be considered in deciding on their geographical location is the distance from the processing industry, the market etc. But ample opportunity exists for the application of scientific and technical findings to intensify and increase crop production efficiency.

At the same time increasing soil fertility is one of the key conditions in taking advantage of the results of strain and seedstock improvement work. In this field the 13th Central Committee Plenum has placed emphasis primarily on reducing the time needed to improve biological material and accelerate the introduction of new proven crop strains and hybrids into general use for which we possess objectively more favorable conditions than capitalist countries with predominantly small farms.

In connection with this task our seed improvement stations aim at achieving in 1985 a cereal production potential exhibiting indicators comparable with the world standard, specifically with wheat seedstock yielding 9 to 10 tons per hectare, barley yielding 7 to 8 tons per hectare, corn yielding 10 to 20 tons per hectare and legumes yielding 5 to 6 tons per hectare which, even if met only by 60 to 70 percent of potential under production conditions promises to result in a dynamic increase of cereal production. In this effort greater emphasis must be placed also on improvement and productions, as well as on the qualitative characteristics of the grains, which goal is also being pursued by license procurement of biological material.

In the case of sugar beet the use of high quality seedstock is vital for economic reasons which can be achieved mainly by seed improvement work, propagating our own seedstock under optimal conditions of climate in other countries such as the Socialist Federal Republic of Yugoslavia. The objective to be attained in strain improvement work is to increase the sugar content of beet by 18 to 20 percent and reach a standard in the agrotechnical cultivation system and in harvesting which will yield 6 tons of refined sugar from a hectare of sugar beet, or roughly 20 percent more than the yield which our best sugar beet growers are able to achieve today. This would at the same time enhance the profitability of the sugar beet industry by better utilization of capacity and the reduction of processing expenditures.

Overall soil and ecological conditions in the SSR are most suitable for intensive raising of potatoes. But achieving self-sufficiency in potatoes is one of the specific political and economic objectives. The task assigned to plant research and improvement facilities calls for developing potato strains yielding 3.5 to 4.5 tons per hectare, increasing their resistance to extreme weather conditions and diseases, raising the starch content of industrial potatoes to approximately 20 percent, or by about 25 percent above the current content and raising the quality of eating potatoes.

With respect to bulk feeds research workers are expected to develop biological material with higher protein content and stabilize the yields of feed crops at 12 to 14 tons of dry matter per hectare, in the case of grasses at 7 to 8 tons of dry matter per hectare. Scientific and technical research work aimed at finding a comprehensive solution to harvesting, improving the storage life of bulk feeds and finding new preservation methods should yield feed quality guaranteeing a 7 to 8 liter milk yield per basic feed ration, a yield exhibited today only in our best agricultural enterprises.

In horticulture, in view of the necessity to increase not only the consumption of fruits growing in the mild climatic zone but also to achieve a measure of self-sufficiency, improvement work aims at developing high yield strains with high frost and disease resistance. Much has been lost by the failure to conduct adequate high quality studies of ecological conditions suitable for the establishment of large-scale fruit orchards, an objective which is now being pursued with increased emphasis.

In view of the biological nature of agricultural products, scientific and technical research aiming at prolonging the storage life of products is especially important. In this respect very encouraging results were achieved for example in the USSR by the application of the so-called electroionization technology in the storage of some agricultural products like fruits, vegetables, potatoes and other crops which exposes them to the action of ozone. This practice extends storage life, saves energy which would otherwise be required for cooling and decreases quality and quantity losses during storage and long-distance transportation.

The outlook is very promising for the development and practical application of growth stimulants which make it possible to influence specific developmental physiological processes of plants. The preparations are being produced by microbiological methods or by chemical synthesis. Such preparations stimulate the ripening process, raise harvest yields and improve the quality for example of cereals, fruits and vegetables, sugar beet, grapes and other crops on condition that they receive a balanced supply of nutrients during growth.

#### **Animal Production**

Our country now expects to take advantage of the world genetic fund also in cattle improvement work to achieve greater differentiation between breeds and crossbreeds raised for milk production of slaughter. The objective



is to improve the productivity of the biological material, to achieve a milk yield of 6,000 to 7,000 liters per cow, in cattle for daily weight gain of 1,200 to 1,300 grams per animal, and in breeders a yield of 110 calves per 100 cows, all indicators which are considerably higher than those achieved by our best cattle raisers today. The prerequisite for the exploitation of such high biological potential is the availability of feed of high quality, and adequate quantity in physical, chemical and biological form guaranteeing balanced nutrition of the animals. A number of other factors, mainly of technical, technological and organizational nature, influence large-scale cattle raising where international cooperation is likewise necessary.

The lack of a comprehensive approach to the solution of these problems in practice, the inability to control the effects caused by interaction of the biological material, feed, raising methods and technology are among the reasons why most of our large-scale cow barns lag far behind their expected yields and profitability.

The problem of reconciling biological, nutritional and technological requirements in intensive and economically efficient production exists also in large-scale sheep raising enterprises and some poultry raising enterprises. Essentially this is a result of a lack of mastery of industrial production technology.

Considerable gaps and bottlenecks exist in technical and technological systems in both crop and animal production, especially in the lack of comprehensive handling ability and efficiency of mechanical means of complete technical and technological lines. Smooth functioning of technical operations in the entire production process is especially important in raising the intensity and economic efficiency of agricultural production and attaining a desirable quality of products. Of special importance, moreover, is the time factor, the need to carry out these operations within agrotechnically optimal time periods, maintaining optimal intervals between feedings, milkings, etc. Therefore, in this area efficiency and reliability are prime criteria of scientific and technical progress and the quality of mechanization in agriculture.

Much room still exists in agricultural production for mechanizing operations carried out now by manual labor, automating stationary and some mobile processes, especially in animal production but also in crop production. Great reserves in utilizing mechanical means to better effect exist in replacing tractors with automobiles as a generally more rational means of transportation, which according to documents from the 13th CPC Central Committee Plenum would yield great savings in fuel and labor. Mechanized means must be used much more rationally in agriculture, machinery must be considerably better cared for and a higher standard and better division of labor must be achieved in repair shops.

Scientific and technical progress penetrates into agriculture also by way of such components of the material and technical base as are facilities for

raising animals, the processing of harvest crops and their storage, the storage of fertilizers, etc. In this regard the 13th CPC Central Committee Plenum again emphasized the necessity of following consistently a construction policy aimed at technically advanced, but at the same time economically advantageous, solutions by reducing material costs, increasing the use of prefabricated parts, utilizing a single design repeatedly, and reducing capital expenditures per unit of capacity. These criteria are also being applied in evaluating some construction projects which are to be built as part of the plan for the development of science and technology. But it appears that while there is no lack of initiative in practice, there is unfortunately also more dissension. The problem of rational utilization of manure from large-scale animal-raising enterprises to eliminate its negative effect on the environment has not yet been resolved satisfactorily. Therefore, improvement aiming at raising the technical and economic standard of agricultural capital construction are being specified which are designed to achieve marked improvement in the course of the Seventh Five-Year Plan.

### Economic Stimulation

One of the problems is to raise the interest of the suppliers of seeds and seedstock, chemical fertilizers, agrochemical services, machines and technical installations, repair services and designers and builders of agricultural facilities in the final results and technical indicators to achieve a high standard of agricultural production. Here serious deficiencies still exist. Therefore, proposals dealing also with this serious problem are being considered in connection with measures designed to improve the system of planned management in agriculture.

No less important is to offer materially more attractive incentives to users of advanced technologies, and to keep alive their interest in using also other than material incentives to raise the technical and economic standard of agricultural production. In accordance with resolutions of the 13th CPC Central Committee Plenum, beginning with 1 January 1980 several economic measures have already been implemented which are designed to shore up not only the *khozraschot* situation of JZD's and SM's [state farms] in all conditions of production, but also to raise the quality of products and exert pressure for better utilization of chemical fertilizers, feeds and economy in the use of labor.

Our scientific and research potential must be further strengthened, especially its quality. The scope of professional training of research workers must be broadened, especially in the field of genetics, physiology, biochemistry and microbiology. Larger and more comprehensive research and development facilities must be gradually established where advanced scientific research laboratories and equipment can be put to rational use.

### Research, Practice

Great potential reserves for increasing the efficiency of scientific and research efforts, and applying scientific findings in practice exist in

closer cooperation of agricultural research with research and development work places of other economic branches manufacturing means of production needed in agriculture where new technical findings can be practically applied. This is so especially in the field of agricultural engineering, agrochemistry, the pharmaceutical industry, the building materials industry, etc. This calls for further consolidation of the function of a unified plan of scientific and technical development, the coordinated development and utilization of international scientific and technical cooperation also in these branches, more frequent use of international problem-solving teams, increased purchase of production licenses, etc. It is especially important to insure that expenditures designed to intensify industrial production are economically justifiable.

The call for faster introduction of findings of applied research in practice is justified. To that end agricultural research, including its technical, developmental and application components, must be further expanded and built up as has already happened organizationally for example in the seed improvement and production sector.

The principal role in transforming findings of scientific and technical research into usable production tools (seeds, animal breeds, feed mixes, machinery, fertilizers, etc.) must be assumed by scientific research, developmental and production organizations. By the implementation of scientific and technical findings of a nonmaterial nature and the integration of elements aimed at implementation into comprehensive management systems the role of our transfer organization--the Institute for Scientific Systems Management and its territorial network of branches--will be further strengthened.

The knowledge and experience gained in implementing scientific and technical findings in our agriculture demonstrate that great delays still exist in developing and producing tested and proven research results, and that little of what is available is also being widely used in practice. This phenomenon must be countered more effectively by a comprehensive approach and coordinated procedure by economic management organs by integrating the efforts and means of scientific, research, developmental, design and production organizations, especially when they are part of different ministries.

The efficiency of work of these organizations, collectives and individuals should also be evaluated and assessed on the basis of stricter criteria. In user organizations good results are usually achieved where management workers are in the forefront of the struggle for the implementation of scientific and technical findings in practice, where the application of new findings and experiences is carried out flexibly and where the organizational effort for carrying projects to fruition does not weaken even when difficulties arise.

BRIEFS

ROSTOCK PORT EXPANSION--The Johnson Concern has signed a contract for a 500 million deal with the German Democratic Republic. Svenska Vag Inc will continue the expansion of the port at Rostock. This is half the order, approximately 250 million kronor. In return, A. Johnson and Company will purchase industrial goods from the German Democratic Republic for approximately 250 million kronor. The contract was signed last Wednesday in Leipzig. The deal means that the international division of Svenska Vag, the Johnson Construction Company, will be continuing the expansion of the port at Rostock. This time, the expansion concerns a general cargo harbor with three quay berths, storage building, crane lines, land work, etc. The concern last year got its first order, to the value of 360 million kronor, which involves the construction of a grain harbor. That project will be completed in the fall of 1982. The construction of the general cargo harbor will be started immediately and is scheduled to be completed by the end of 1983. The project will provide employment for 30 Swedish staff members and 125 construction workers at the site. The contract was concluded between, on the one side, Svenska Vag Inc --through the Johnson Construction Company--and the trading company A. Johnson & Co , and, on the other side, the foreign trade organization of the German Democratic Republic, Industrie Anlagen Import. A. Johnson & Co HAB recently opened an office in Berlin. [Text] [Stockholm DAGENS NYHETER in Swedish 5 Sep 80 p 32] 7262

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ECONOMIC RELATIONS WITH DEVELOPING COUNTRIES DESCRIBED

Budapest NEPSZABADSAG in Hungarian 13 Aug 80 p 10

[Article by Janos Tormasi, main deputy chief, Ministry of Foreign Trade: "Our Economic Relations with Developing Countries"]

[Text] Extreme viewpoints about the importance of the economic relations we are maintaining with developing countries, and in the evaluation of the hidden potentialities in developing these relations, are not unusual. Overestimation of the importance of the relations and of their outlook for further development, as well as intolerable disparagement of the cooperation, can be found also.

The share of developing countries in total Hungarian exports in recent years has been somewhat over 8 percent, on the average. Of nonruble accounting exports, however, (including nonruble accounting exports to socialist countries) nearly 17 percent was directed to developing countries. The volume of our exports to several developing countries is competitive with that of our exports to important capitalist markets. For example, in 1979, Iraq was in fifth place among out nonsocialist exports, surpassing Great Britain, France and the United States, among others. In 1979 Kuwait, Syria, Algeria and Libya purchased as much Hungarian export merchandise as did Greece, Belgium or Finland, for example. Lebanon, Iran, Nigeria, Tunisia, India and Brazil are no less important buying markets.

The proportion of our imports from developing countries is somewhat less than our exports. It comprises nearly 6 percent of our total, and nearly 11 percent of our nonruble account imports. According to 1979 data, among our more significant suppliers, Brazil was in sixth position among nonsocialist countries, surpassing, for example, France and Holland. We purchased more from Iraq than, for example, from the United States or Sweden.

The developing countries' share in the exports of several product groups and in the imports of certain rather important merchandise surpasses the previously mentioned proportions considerably. For example, nearly 40 percent of our machinery exports for nonruble accounts is to developing

countries, and 55 percent of our nonsocialist imports of agricultural and food industry products originate from these.

#### **Last Year's Results**

We consider the 1979 results as favorable from the standpoint of our economic relations. The value of our exports to developing countries exceeded \$700 million, which is 26 percent higher than the year before. Our imports amounted to \$655 million, which exceeded the previous year's amount by 4 percent.

The composition of the trade also turned out to be favorable. Machinery, assembled equipment, vehicles, instruments and components comprised 35 percent of our exports, while another 21 percent consisted of bulk metal items and industrial consumer goods. The proportion of metallurgical and chemical industry materials comprised nearly 21 percent. The remaining 23 percent was composed of shipments of food industry products, live animals and other agricultural products.

The major portion of our imports consists of energy sources, raw materials and agricultural products which may be acquired economically from developing countries. More than 10 percent of our purchases consist of industry products, industrial consumer goods, tools, bulk metal items and, to a lesser extent, machinery. The proportion of food industry, semifinished and finished products exceeded 30 percent.

Last year more than 800 Hungarian specialists worked in developing countries, assisting the development of the national economies of the host countries. This is important from the standpoint of developing our economic relations. Nearly 60 citizens of developing countries received specialized training in Hungary.

The dynamic growth of trade continued during the first half of 1980. Our exports are expected to reach \$850 million, and our imports to approach \$707 million.

#### **Tasks of Development**

The intent of the policy to develop the economic relations which we are maintaining with developing countries was set down by the twelfth congress of the Hungarian Socialist Workers Party as follows: "We are further strengthening the mutually advantageous economic relations with developing countries. Within the realm of our capabilities, we are aiding them in consolidating their economic independence. Foreign trade with developing countries is to increase at a rate greater than the average."

The tasks are complex. We must continue to dynamically develop the value of exports to developing countries. The merchandise structure of exports is to be made more modern and more profitable. Thus, our attention must be concentrated primarily on two branches of our exports.

The exports of machinery, complete installations, vehicles, instruments and generally competitive and profitably marketable products manufactured with modern technology and specialized skill are to be increased. In harmony with the planned development directions of the Hungarian machinery industry and the growing needs of the developing countries, our exports must place greater stress on the deliveries of various production and service systems (agricultural, educational, public health, water and transportation).

In addition, in our many important buyer's outlets (Iraq, Kuwait, Libya, Saudi Arabia, Iran, and Nigeria) and many other developing countries, we have not nearly exploited the full possibilities of expanding our agricultural and food industry product exports. The most important condition for so doing is the expansion of our exportable merchandise bases. There are significant needs especially for cattle and beef, frozen chicken, sheep and lamb, as well as for goats and edible oils.

#### Through Improving Market Efforts

In order to implement the planned dynamic development of our exports, more careful work appropriate to the rapidly increasing demands must be performed as much in trade, narrowly defined, as in production. We must improve our exploration of market requirements and must adapt better to the customs and peculiarities of developing countries. Our enterprises must significantly improve their performance in order to exactly satisfy their contractual obligations, especially in respect to quality and delivery schedule. Through failures here, the enterprises will be forced to learn, through not only large direct losses, but rather through the loss of possible future business, that the developing nations market is also becoming more and more exacting.

We must explore more thoroughly and better exploit the most favorable export potentialities to the developing nations. It may be possible to replace other unfavorable foreign import sources with the supply available from developing countries. Energy sources and certain raw materials (unrefined phosphates, iron ore, raw rubber, wool, cowhide, etc) will continue to comprise the largest factors in our imports in the future. In concert with the development of the delivery capabilities and the growing requirements of the developing countries, however, the imports of processing industry products (primarily textile and leather industry merchandise, tools, bulk metal and simpler machinery) will also increase. At the same time, it also appears that, because of gradual saturation of our domestic needs, our imports of several tropical products (coffee, cocoa) will grow at a slower rate.

#### Long-Term Cooperation

We must place great stress on broadening longer term cooperative relations with enterprises of developing countries. The expansion or even the

maintenance of our market position over the long range is unthinkable merely on the basis of traditional export-import traffic. Above all, in the cooperative manufacturing of certain transportation vehicles, in the agricultural machinery manufacturing industry and in the area of agricultural production, possibilities for further implementation of cooperation are apparent.

Often the successful implementation of production cooperations requires that Hungarian enterprises participate in joint economic undertakings in developing countries and establish either their own or joint ownership enterprises. There have been a number of such initiatives thus far, but the development is slower than is desirable. Naturally, we must continue to exercise caution so that the burden and risk of such undertakings remain within our means and within the framework of economic sense. A good many impeding factors (for example, the relatively large investment necessary for just such undertakings; perhaps unfavorable local circumstances or requirements, etc) should not be disregarded. However, considerably more dynamic development of this form of cooperation is necessary to expand our economic relations.

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## IMPROVEMENT, SHORTCOMINGS IN TRADE BALANCE VIEWED

Budapest NEPSZABADSAG in Hungarian 24 Aug 80 p 3

[Article by Istvan Foldes: "What Is Welcome and What Is Not"]

[Text] The data of the first half year attest to the welcome improvement of the country's foreign trade balance. The import surplus of the first 6 months is exactly one-half of the previous year's. This is due as much to the nearly 4.5 percent decrease in imports as to the 3.8 percent increase in exports. The balance improved especially in the nonruble trade account. In this relation, the imports decreased by 7.1 percent, compared to last year, and exports surpassed last year's amount by 13.2 percent. As a result of this, the passive balance of the nonruble trade account dropped by an even greater amount than planned, to one-fifth of what it was.

## The Chief Goal Is Realized

It is common knowledge that, appropriate to the direction chosen by the 1978 December resolution of the Central Committee, this year's national economy plan selected as its chief goal the improvement of the national economy's balance status, and primarily the improvement of the nonruble account foreign trade balance. The rate and proportion of production and domestic consumption are to be subordinated to this goal. The accomplishments of the first half year indicate the successful implementation of this economic policy. They are proof that the party's economic policy goal was realistic, and that economic direction utilized fundamentally appropriate methods to accomplish this goal.

Economic planners realized that the rectification of the foreign trade balance could be accomplished only through a temporary slowing of production, and to a greater extent, through a reduction in domestic consumption. Appropriately, the increase in the national income slowed somewhat even last year, and investment activity and the population's real income stayed at the 1978 levels. This year's plan was also expecting a relatively small increase in production--although exceeding that of the previous year somewhat--and a decrease in domestic consumption.

The production data of the first half of this year indicate that while the balance improvement is more favorable than planned, the growth rate continued to decrease. However, while last year the national income's failure to reach the planned level was basically caused by the stagnation of agricultural production due to unfavorable weather, the industrial production decrease in the first half of this year is caused by falling behind schedule. The gross production of socialist industry was 1.8 percent less in the first 6 months of this year than in the first half of 1979. Within this, the performances of the electrical energy industry and the building materials industry exceeded those of the previous year, food industry stayed even, but the other industry branches produced less than in the first half of 1979. The building industry's production decrease was greater than planned. Thus, the improvement, exceeding the plan, in the balance situation is in no small measure the result of the lesser import needs of a declining industrial production.

The industrial production decrease is not large scale, and the fact that it happened coincidentally with the realization of our other objectives (since the foreign trade balance improved, and the stockpiles decreased, rather than increasing even contains a certain positive element within itself. Nevertheless, it still indicates--and this is primarily what is not welcome--that our industry's adaptation to the altered conditions is still slower than is desirable.

The lower domestic demand had to induce enterprises to endeavor to put their released capacities to use primarily in export-directed production, that is, to replace imports. The half year's data reflect that endeavors to improve the structure of industrial production undoubtedly increased. This was definitely revealed by the dynamic growth of exports. However, it was not enough to compensate for the decrease in solvent domestic requirements. If this development in industrial production--although it did improve the foreign trade balance, and in our situation today this is primary--were to become permanent, it would cause a standstill in our total development. This is not desirable at all.

#### Too Much Caution

The change in the regulation system, and especially the enterprise uncertainty caused by the new price system, undoubtedly had a role in the development of industrial production in the first half year. Because of late publication of production prices and the production price halt in the first quarter, many enterprises postponed the finalization of contracts. Caution was especially noticeable in enterprise investments. It is understandable that enterprises needed to survey their probable income situations and to formulate appropriate strategies. However, passivity is still discernable in places, although it became apparent that the income situation of most enterprises under the new price system is more favorable than they expected. There are some enterprises, however, which are struggling with either temporary or prolonged difficulties. The resolution of the situations of several of these is requiring central intervention.

In any case, that there are very divergent performances hidden behind the industrial or branch averages may be considered a favorable sign. In the machine industry, for example, in the first 6 months the Automobile Electric Equipment Factory and the Hungarian Ship and Crane Works produced 20 and 5 percent more respectively, while the Communications Technology Enterprise and the Office Machine and Refined Technology Enterprise produced 16 and 23 percent less respectively than during the same period last year. In the cotton industry, during the same period, Rabatext produced 5.3 percent more, while the Kóhanya Textile Works produced 10 percent less. Shoe industry production increased by 2 percent, but within this, the production of the Szabolcs Shoe Factory increased by 30 percent, while that of the Duna Shoe Factory decreased by 2 percent. The furniture industry produced 1 percent more, but, for example, the production of the Cardo Furniture Factory was 12 percent greater, and that of the Bacska Furniture Industry Enterprise was 15 percent less than a year earlier.

We are not to be misunderstood as saying that enterprises are to be evaluated solely on the basis of the dynamism of gross production, since, for example, production decrease can be a temporary phenomenon due to structure changes, and large scale production increases can also be the result of seasonal boom factors. The differentiation, however, is definitely a good sign of the beginning of realignment and is thus welcomed.

#### More Rapid Changes in Structure

The improvement of the production structure, to which the 1977 October resolution of the Central Committee referred with special emphasis, is naturally a multiyear--actually a continuous--task. Today it is quite apparent that the noticeable results of government and enterprise measures directed toward this end appear only years later. Even such relatively rapid and successful actions as investments supported by bank export development credits are mostly producing their significant export merchandise bases only after 2 or 3 years. (In any case, last year an income of \$870 million was realized from the production of the investments implemented within the framework of this credit construction.)

Nevertheless, the past months of this year call attention to the fact that enterprise activities directed toward alteration of the structure are not nearly sufficient. This is so all the more because the possibilities for external balance improvement through reductions in domestic consumption have, for the most part, been exhausted. Thus the basic problem of economic development has become: how capable are enterprises in modernizing their production, in improving efficiency and in reducing their manufacturing costs.

It remains invariably true that the country does not prosper from production quantity, but rather that production's income generation is primary. We shall continue not to make a fetish of gross production quantity or of its growth rate. The national economy plans, however, are expecting that the temporary necessary growth rate decrease be accompanied by the reorganization of the production structure, by the facilitation of a more rapid development

of production and national income, and, along with it, by an increase in domestic consumption and the more rapid creation of the conditions of economic and social progress. Within this concept, of course, temporary growth stagnation may perhaps be desirable. It can only be permitted, however, if very active, efficiency-increasing, production structure-improving, cost-reducing, balance-improving effort is inherent in it.

Soon three-quarters of the year will be behind us. The part that has passed, or rather, the data which is available from it indicate that the fundamental endeavor of our economic policy is being realized--the external equilibrium of our national economy is turning out to be even more favorable than expected. As far as industrial production is concerned--this is the only thing discussed in some detail in our article--indications are that a recovery can be expected during the second half of the year, and that on the annual level, industrial production will equal or perhaps slightly exceed last year's level.

#### On the Eve of the New Five-Year Plan

Even greater activity and more initiative are needed for the proper preparation for the coming five-year plan and even more for the subsequent plans. Above all, the nearly 2-year long improvement trend of the national economy balance must be strengthened. The improvement in industrial performance and agricultural production which are expected to be appropriate to the plan can provide the opportunity for us to bring the country's foreign trade balance into equilibrium sooner than expected. While undoubtedly the development of the capitalist economy is not making the work of our businessmen easy--to say the least--the good experiences of the first half year indicate that it is possible to sell at a favorable price even under unfavorable market conditions, as long as the quality and technical characteristics of the products satisfy the purchaser's requirements, and if those active in foreign trade felixibly exploit the opportunities presented by the market.

With the end of 1980 not only the year is being concluded, but also a five-year plan period. Thus, in the remaining months we must work not only to improve the year's performance, but also to lay the foundations and make proper the preparation for the next 5 years. The party's 12th congress outlined the chief features of the next plan period, and the enterprises are continually receiving more information to carefully prepare their plans from the National Planning Office and the ministries. There is a need for planning and recommendations reflecting a sensible enterprising spirit--thinking and recommendations with which it is possible to genuinely alter and solidify our economy, make our work more effective and create the conditions for improving living conditions and the standard of living.

This is the ultimate goal. We view the stagnation of the standard of living as an unavoidable period in our economy, a period which we would like to have behind us as soon as possible. We know that this depends neither on our determination, but that world market factors also have an effect on when we may have our difficulties behind us. However, our conscience will only be clear if we do all that we can to more rapidly improve the production structure and to improve its effectiveness.



DEPUTY MINISTER INTERVIEWED ON FUTURE OF MINING INDUSTRY

Budapest MAGYAR HIRLAP in Hungarian 7 Sep 80 p 5

[Interview with Dr Laszlo Kapolyi, deputy minister of the heavy industries, by Ferenc Vicssek: "Mining Is Competitive"]

[Text] Dr Laszlo Kapolyi was born in Ujpest in 1932. Between 1950 and 1962 he earned PhD's in general engineering, mining engineering, then in industrial economics. After 1951 he worked in planning institutions. From 1953 to 1976 he worked at the Tatabanya Coal Mines, first in the production departments, later in various management assignments, and finally as chief development engineer. He has been deputy minister of heavy industry since 1976. In 1968 he became candidate of technical sciences, and received his PhD of technical sciences in 1975. Since 1978 he has been honorary university professor of the Eotvos Lorand University of Sciences [ELTE]. In 1979 the Hungarian Academy of Sciences [MTA] elected him to corresponding [associate] membership.

Mining's growth cannot be studied solely on the basis of the general increase in the value of raw materials. This branch of industry, with its definitely high demand for investments, is unable to follow directly the strong fluctuations in the system of values. That is, changes in the economic status of mineral raw materials can be followed from one day to the next only at the cost of great sacrifices. However, falling far behind the global value changes also requires similarly great sacrifices. Expansion in opening up the natural resources depends to an especially large extent on the national economy's production structure and on its expected changes. Therefore, each and every idea for the expansion of mining also competes with the modernization programs of the other industrial branches, while at the same time it is also closely interrelated with those.

Therefore the outlook for mining--which is, after all, a promising one--can be described only by taking these viewpoints into consideration. Our reporter Ferenc Vicssek talked with Dr Laszlo Kapolyi, deputy minister of heavy industry, about this.

[Question] Generally the development of mining derives from the growth of the economy. However, this might even lead to the conclusion that the miners can count on only a modest rate of expansion in the near future, since in the final analysis the projected very moderate growth in demand and the energy sources under construction do not justify vigorous development in opening up mineral raw material resources. Is this true?

[Answer] To answer this, the situation of mining's individual branches have to be separately examined. On the one hand, full or partial fulfillment of the increased demands is not the only task the development of mining has. In some cases it also has to substitute for or replace imports; and on the other hand the general goal is to achieve as high a degree of processing of the mineral raw materials as possible, and to use them comprehensively in as broad an area as possible.

To start with the energy sources of special significance, it can be concluded that our basic opportunities for satisfying the demand are: increased domestic coal production, further exploitation of the domestic petroleum and natural gas resources, nuclear technology also based on the domestic production of uranium ore, and the import of energy sources. However, the possibilities of combinative economic manipulation with them are narrowed down by the fact that our hydrocarbon resources are limited. Over the long range we can expect to maintain the present production levels only if our geological research is successful, and if the mining technologies are modernized. The perspectives of uranium mining are unquestionably in order. In the final analysis, we have mineral resources offering significant production expansion only in coal types. The known and expected resources make twice today's production level possible until the end of the 21st century. Why is this a decisive fact? Because, due to the given circumstances of the mineral resources, decreasing the import of energy sources can be counterbalanced only by increasing domestic coal production, as a realistic alternative. And in energetics the resources and users form an interrelated system, which cannot be left out of consideration in reshaping the structure of the country's energetics system. And, in addition to the commonly known changes in the system of values, reshaping the energy structure is justified also by the fact that the imported hydrocarbons can be used to greater advantage in the chemical industry, in petrochemistry--and the natural gas in metallurgy and in use by public entities--than in generating energy. Thus it is not expeditious to maintain the present energy production structure in which each year we burn several million tons of petroleum and several billion cubic meters of natural gas in power plants.

The means of modernizing energy production are: decreasing the growth rates of demand and of specific consumption, increasing the degree of processing hydrocarbons, construction of nuclear power plants, and increasing coal mining, all taken together. By decreasing the use of hydrocarbons in energetics their use in the chemical industry can be increased, because this serves the production of new and more valuable products to a greater extent than in the present. Thus, coal will take over the role of hydrocarbons removed in this manner from the energy policy. In the next 30 to 40 years, coal and the nuclear power plants can together, in a 50-50 split, cover the increasing demand for electrical energy.

[Question] What will be the extent of change this will mean in the country's energy structure between now and the end of the century?

[Answer] According to our studies, 3 to 4 million tons of petroleum or petroleum-equivalent natural gas can be replaced by coal per year: this much petroleum can be used for products processed on higher levels. However, in order to do this it will be necessary also, in the coal-based energetics--which has again earned its right to existence--to use such higher technological standards that there will be no mean "retrogression" in comparison with the use of hydrocarbons. By means of the combinative energy policy we can thus succeed by the end of the century--by modernizing the production structure--in satisfying 50 to 60 percent of the expected energy needs with domestic resources.

[Question] What role will our other mineral resources play in this combinative raw material policy?

[Answer] Here we must talk about two significant domestic mineral resources: bauxite and copper. Processing industries can be economically built on both, so that production is not being forced to import raw materials. The bauxite-alumina-aluminum industrial branch has successfully accomplished the development ideas. We have achieved such high production and processing standards based on the quantity and quality of the bauxite finds, and we have developed such a production structure--more precisely, we have the possibilities to further develop the production structure in such a way--as to offer exportable products in every phase of production. That is, all expenses of production are recovered in aluminum's world market price, and the world market is glad to receive this characteristically energy-demanding product. In the meanwhile, the development of production built on aluminum has become an integral part of the Hungarian industry's structure, and has become one of its outstandingly well developed branches. We have resolved most of the smelting within the framework of the Hungarian-Soviet aluminum agreement, based on mutual advantages. However, in addition to maintaining this, we have also prepared to increase several-fold the capacity of our own aluminum smelting, the basis of which is a possible approximately 20 to 30 percent increase in bauxite mining production.

Speaking of the perspectives of mining, we must also mention the copper ore find at Recsk. In addition to copper this also contains lead, zinc and valuable rare metals. Thus, a vertical processing industrial complex may come into existence based on copper ore mining which, when coupled with the production development in Csepel, may also create the merchandise basis for significant exports, in addition to fulfilling the domestic needs. And the lead and zinc obtained from the copper ore will increase the domestic supply of nonferrous metals, primarily to replace some imports. In addition to all these, the mining of a number of nonmetallic minerals (pearlite, zeolite, dolomite, etc.) can also be competitively developed.

[Question] In the final analysis, such broad reliance on the domestic resources means industrial development which produces raw materials. Due to its high demand for investment, the expansion of mining ties down a significant share

of the national economy's development resources. Thus, of these resources already in short supply, even less will be available for modernizing the processing industries; that is, this will conserve its production levels and structure.

[Answer] The profitable extent of increasing the production of domestic mineral raw materials is necessary precisely because of the national economy's modest development opportunities. In the final analysis, decreasing the import burdens will also serve to improve and modernize the processing industries. The combinative raw materials strategy already mentioned above, refers to this entire area.

The question is not whether we should develop the processing industry or the mining industry, but whether we should obtain the mineral raw materials for the possible development of the processing industry from domestic mines, or from imports. For the first alternative, domestic mines have to be established and operated. And for the second alternative we must take care of counterbalancing the imports by developing the exporting branches. However, it is characteristic for the present system of values that for example in the case of energy sources, domestic coal mining can be developed for half or one-third of the investments which would be necessary to counterbalance [equivalent] petroleum imports by the products of some export-producing branch of the processing industry. By supplying our energy domestically, the production cost is also lower than in the case of import purchase prices. If we will develop the domestic mining industry in this spirit, we will not be decreasing the opportunities of the processing industry, but--in contrast with relying on the import of energy sources--more of the development resources will remain available for the processing branches.

[Question] Will the number of people employed in mining also have to be increased with the opening of new mines, or will the character of mining undergo fundamental changes?

[Answer] Making sure that we have the necessary manpower is almost as difficult a task as is creating the finances needed to cover the expansion of mining. It would not even be possible to undertake this task without improving the safety of mining and increasing its productivity. However, in order to increase productivity, the industrial background of mining must be expanded to such an extent that it would not hinder the technological level of production.

Using the planned new mining technologies, mining's productivity may increase 2 to 2.5 times the present level of productivity by the turn of the century, including the old operating mines. The amount of raw materials mined will double in terms of tonnage, while employment will decrease in the branch by 20 percent. In the meanwhile the miners will have to become experts in several trades, who feel equally at home operating and maintaining the mining machinery. This growth is part of that unbroken process within the framework of which the generations of miners have created the capacity to meet the economy's raw material needs.



## SIX-MONTH FULFILLMENT OF 1980 PLAN ASSESSED

Warsaw ZYCIE PARTII in Polish No 8, Aug 80 pp 1-2

[Article by Stanislaw Gebala, deputy member of the PZPR Central Committee and director of the Central Committee's Trade and Finance Division: "At the Halfway Mark in the Implementation of the 1980 Plan"]

[Text] In evaluating the socioeconomic results of the first half of the year, it should be remembered that we began the current year with very serious stresses on many segments of management. Last year ended with relatively poor results in agriculture, and we failed to meet the planned production targets for a variety of manufactured products, as well as raw and other materials. Taking this into account the National Socioeconomic Plan envisaged a relatively conservative growth rate while at the same time placing the principal emphasis first, on harmonizing economic processes; and second, on increasing management efficiency. The degree to which the social aims of the plan will be implemented was made conditional on reaching these two goals.

## Favorable Trends

In analyzing economic growth it is therefore necessary to monitor with equal attention both the completion of actual production tasks and the progress in strengthening stability and forming efficiency trends. In the first half of the current year, and especially in its second quarter, several favorable trends appeared in the economy, among which should be emphasized the generally successful implementation of the plan for the production of nonagricultural materials as well as restraining the unfavorable balance from the second payments area [capitalist countries].

In the period from January to June, 50.4 percent of the annual production plan for goods to be sold by industry was met, and in comparison with the first half of the previous year, that production rose by 7.0 percent. The factor leading to the improvement in the production rate was a significant improvement in the power industry. Interruptions in electrical service to industrial users were incomparably less frequent than in previous years. There was also an easing of transportation problems, which in the

previous year had so seriously hindered both the delivery of raw and other materials and the transportation of finished products from businesses, causing disruptions in supplies. In the first half of the year the basic production of construction and installation businesses grew by 3.6 percent, or 4.6 points more than the plan target.

In the attempts to harmonize the economy, the main effort was directed toward improving the balance of payments to nations of the second payments area as well as toward strengthening the balance of trade. In the first half of the year exports to capitalist countries increased by 30.1 percent in comparison with the same period last year. This should be considered as positive, while nevertheless remembering that the first half of 1979 was characterized by a relatively low level of exports. At the same time, imports from capitalist nations grew at a slower rate, i.e., about 14.8 percent. In fact, for the first time in this decade we attained a favorable balance of trade turnover with the second payments area, i.e., over 600 million foreign-exchange zlotys in the first 6 months. Prices are continuing to increase rapidly on the international capitalist market, while in the first half-year our average export prices rose somewhat more slowly than the prices we paid for imports. This signifies an unfavorable trend for us in the terms-of-trade index.

#### What Should Be Improved

A rapid, higher-than-planned growth in the population's monetary income during the first half of the year had a negative effect on money-market stability. Its primary cause was the exceeding of the planned wage fund, which in the first half of the year reached 7 billion zlotys. These excesses were particularly sharp in the first months. However, thanks to an improvement in wage discipline in May and June this phenomenon was significantly checked, and this should be regarded as a positive trend.

Exceeding of the wage fund was due primarily to continuing higher-than-planned employment. This exceeding of the wage plan would not in itself have so seriously affected market stability if it had been justified by additional production. However, it is estimated that the 2.6 billion zlotys in wages was not offset by higher-than-planned production results.

Overfulfillment of the payment plan was somewhat compensated for by higher-than-planned deliveries of goods to the market during the first 6 months. Nevertheless, this did not have any influence on relieving the stresses on all segments of the market since the composition of goods delivered to the market was not entirely in keeping with the plan. It is estimated that with respect to goods on three lists, the delivery shortfall in the first 6 months amounted to 12 billion zlotys.

One of the most important segments in which there has been no improvement is the meat market. This is associated with the nonfulfillment of the plan for procurement of slaughter animals. In comparison with the first

half of 1979, the procurement of slaughter animals diminished by 2.7 percent, with a resultant decrease in delivery of meat and meat products.

Despite a certain improvement, there were still numerous stresses during the first half of the year on the economy's materials-equipment supplies. A factor which further worsened the supply situation was the continued inefficient management of stocks. A recent review of material supplies revealed a significantly higher level of supply irregularities than was indicated by enterprises which were included in the Chief Central Statistical Office's report at the end of 1979. In the course of the inspection, irregularities in materials supplies worth 41.3 zlotys were exposed. This included 11.8 billion zlotys in unnecessary supplies, and 29.5 billion zlotys in excess supplies.

In the first half of the year, the process of putting the investment front in order proceeded at a rate close to what was planned. Compared with the first half of 1979, investment outlays were reduced by 1.2 percent. Nevertheless, the outlay trend was unfavorable. The growth of outlays for construction and assembly work was too slow, while at the same time purchases of machines and fixtures grew too rapidly. One of the results of this was the increase in uninstalled machines and fixtures. This phenomenon was arrested in June.

The economy's weak point remains considerable inefficiency in implementing investments, leading to serious delays in fulfilling the tasks. During this 5-year period, we are seeing an increase in this phenomenon. The current average cycle of realization of capital expenditures, which in 1975 was 30 months, increased to 36 months in 1978, and to almost 39 months in 1979, despite the fact that in accordance with the assumptions of the plan it should have been shorter in 1979 than in 1975. No improvement has yet occurred in this area in the current year.

Delays in realizing capital expenditures also occur in apartment construction, an area which is of particular social importance. The lowest rate of implementation of the annual construction plan occurred in large urban centers.

All in all, despite the arresting of unfavorable trends in some areas, the state of the economy is still characterized by a variety of shortages and stresses. The leadership of the party openly points to the serious problems with which we are struggling, but which we can and must overcome. In addressing a recent meeting of the active members of the central political-economic committee, the first secretary of the PZPR Central Committee, Edward Gierek, declared:

"...We are dealing with serious problems, but we have considerable means for overcoming them. This requires considered, consistent and disciplined action from all of us. We have a good program of action. It was drafted in resolutions of the eighth congress and is being systematically implemented in government policy."

## Implementation of Tasks

The coordination program became an important factor in these activities, as did the State's revised legislation concerning further implementation of the current year's plan. It is worth remembering that the motive for such action and for the subsequently decided-on changes regarding certain means and actions of the NPSG [National Socio-Economic Plan] is the fulfillment of production targets in industry and other areas of activity in the face of limited imported supplies while concurrently emphasizing the growth of production based on native resources. These objectives were accepted with full understanding by ministries, unions and individual enterprises. The result is that instead of the initially-planned lowering of industry's production assignments by 60 billion zlotys, adjustments of only 30 billion zlotys were made in the original NPSG targets. And it appears possible that this figure will be reduced during implementation, as judgments on the way initial steps taken by industry.

Foreign trade and market stability will remain areas of key importance in the second half of the year. In both instances, improvement depends first of all, though not only, on fulfillment of plans for material production, especially in industry. It depends not so much on general production increases as on greater discipline in implementing the plan for the structure of manufactured goods. In the first half of the year a significant shortfall occurred in production of goods for export, while at the same time the production plan for so-called remaining purposes was surpassed. Among other things, the actual need by national investors for machines and equipment was exceeded. Export priority demands that we not only attain the planned quantities, but that we aim to exceed them. Stimulation of exports with a concomitant rationalization of imports is the only way to strengthen our nation's payments position.

One goal year aspiration for growth of Poland's economic cooperation with foreign nations is toward the socialist countries, especially the USSR. The 1970 session of COMECON, which took place in June and at which results of cooperation to date were evaluated, indicated new elements for its further development. For the second half of the year, the principal task of industry and of the foreign trade apparatus is to take maximum advantage of the possibilities of increasing turnover, particularly of the imports from socialist countries.

In activities aimed at improving supplies for the domestic market we cannot limit ourselves only to fulfilling the planned value of deliveries. The task of assuring the stability of individual segments has now come to the fore. Most is involved is uncompromising adherence to the plan for the value of goods to be delivered, as well as assurance of continuity of sale of basic food products and consumer goods. There are potential sources of additional production of a variety of market articles. These are, for example, the furniture industry, light industry, all types of enterprises and other enterprises which are capable of producing goods



for the market, but have not yet done so. Increased labor-intensiveness is often necessary to take full advantage of these capabilities, and with it there are additional costs. The department of domestic trade is working on balancing these needs. They will be covered by, among other allocations, 450 million zlotys from the wage funds of the Committee for Market Affairs. Judicious spending of this fund may yield 2 to 2.5 million zlotys. The departments and cooperatives concerned have worked out concrete plans for increasing production of market goods, including food.

#### Cheaper Means More

The basic condition for accomplishing the targeted tasks in the second half of the year, as in future years, remains increased management efficiency. We have not noticed significant progress in this area in the first half of the year. Comprehensive efficiency measures must lead to fuller use of all production resources. Raw and other materials are the relatively scarcest elements of production at present; their shortage in many instances limits the extent to which production capabilities may be taken advantage of. We must intensify efforts to lower material-intensiveness, whose level is still excessive. There are also considerable reserves of inadequately-exploited labor resources. In comparison with 1979 there was an increase in the first 6 months of the current year in absences due to illness, as well as unjustified absences, and almost 10 percent of the nominal work time is squandered. We must manage our wage funds more wisely.

The most important point is to assure that while businesses aim at fulfillment of actual production plans, they at the same time aim at lowering the costs of production. In the plan for the current year, thanks to the decrease in individual consumption and the resultant decrease in material costs, the combined savings in industry and construction amounted to approximately 25 billion zlotys. This is a sum which may have substantial influence on limiting production costs and, indirectly, prices.

While working on lowering costs, it is essential to pay closer attention to the extreme losses whose totals tend to be increasing, indirectly reflecting the scale of the various irregularities in the operation of businesses. We must make the public clearly aware that the national income must be increased through a reduction in costs, in effect providing greater resources for consumption and development.

The tasks facing the economy in the second half of the year are not easy. The solution to current social problems will depend on the degree to which these tasks are fulfilled, as will the starting point of the new five-year plan.

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## PROBLEMS IN IMPLEMENTING HOUSING CONSTRUCTION PROGRAM DESCRIBED

Warsaw INWELTY JE I HUDOWNICTWO in Polish No 7-8, Jul-Aug 80 pp 13-16

[Article by Aleksander Kapustka]

[Text] Among many vital problems discussed both in the pre-Congress discussions and during the deliberations of the Eighth Party Congress, implementation of the long-range housing program, one of the most important goals of the socioeconomic policies of the 1970's and 1980's, occupied a prominent place.

The housing program, comprehensively prepared and formulated in a resolution of the Fifth Plenum of the PZPR Central Committee and in a Sejm resolution dated October 19, 1972, set housing requirements for the 1970-1990 period at 6.9-7.3 million dwellings. This program, according to Environmental Development Institute forecasts for the individual five-year plans, is shown in the following table.

Table 1. (In thousands of dwellings)

(1) Data	(2) Cities	(3) Miasto	(4) Wios
1971-1975	1140	880	260
1976-1980	1660	1200	460
1981-1985	2180	1700	480
1986-1990	2680	1880	800
1970-1990	7870	5760	2110

Source: A. Kapustka, "The Substance and Time Frame of the Investment Process," Zielona Gora, 1978, p 23.

Key:

- |          |            |
|----------|------------|
| 1. Years | 3. City    |
| 2. Total | 4. Village |

This shows that 2,690 thousand dwellings were envisaged for the first ten-year plan, while during the second ten-year plan, 1980-1990, 4,580 thousand dwellings are to be built. The State's efforts in implementing the housing program as shown above were concentrated on preparing the

indispensable construction potential of erection-assembly enterprises, building prefabricated-elements factories and modernizing and expanding many industrial plants closely connected with the housing industry.

During 1971-1975, investment outlays for municipal and housing construction amounted to 326 billion zlotys, 71 percent more than during 1966-1970.

During the past five-year plan, 1,125 thousand dwellings, with a total floor space of 63 million square meters, were built. The plan goals set for 1971-1975 were fulfilled 104.2 percent, thus implementing 15.4 percent of the long-range construction plan projected to 1990. In comparison to the prior five-year plan, housing increased by 183,000 dwellings. The average size of dwellings also rose, from 42.8 square meters in 1970 to 47.1 square meters in 1975.

For 1976-1980, construction of 1,575 thousand dwellings was planned, including 1,193 thousand dwellings for socialized construction and 382,000 for individual construction. In addition, construction of 1,307 thousand dwellings for the non-agricultural population and 268,000 dwelling for the agricultural population was projected.

In comparison to 1971-1975, the present five-year plan envisages an increase of 450,000 dwellings, including 390,000 for the non-agricultural population. This large increase in planned housing construction is possible because of the completion, during 1971-1975, of 87 factories producing large-panel elements, and the construction, by 1980, of 79 house-construction factories.<sup>1</sup> The total production capacity of the prefabricated-elements factories, up to 1979, was 13.2 million square meters of dwelling space annually.<sup>2</sup>

Despite such large outlays allocated for increasing construction potential during 1976-1979, the annual housing construction plans were not fulfilled, especially multi-family construction for the non-agricultural population. During these four years, 73.7 percent of the five-year plan was fulfilled, with completion of approximately 1,161 thousand dwellings. Thus, for the last year of the current five-year plan, 414,000 dwellings remain to be built, or 26.3 percent of the plan goals for the entire five-year plan. The situation here is worsened by the fact that the largest backlogs arose in the large urban centers, such as Gdansk, Katowice, Wroclaw and Warsaw, where housing requirements, due to development of industry and services, are most critical.

<sup>1</sup> M. Wawrzeniuk, Eighth Plenum, PZPR Central Committee, "Assessment and Developmental Trends in Housing Construction," *INWESTYCJA I BUDOWNICTWO*, 1977, No 9.

<sup>2</sup> Eighth PZPR Party Congress, "Basic Documents and Materials," *KIW [Książka i Wiedza]*, Warsaw, 1980, p 27.

It should be noted that during this period average floor space in dwellings increased by five square meters since 1975 and now totals 52 square meters in socialized construction. As a result, density rate per room dropped from 1.21 people in 1975 to 1.06 in 1979.

Another problem revealed itself during the current ten-year plan: lack of the facilities that must accompany housing construction, the social service facilities. The backlog from the 1970's, which amounted to 1.3 million square meters of floor space, increased by 45,000 square meters during 1971-1975. The plan called for 1,313 thousand square meters of floor space, but only 1,268 thousand square meters were completed.

Outlays for technical infrastructure were greatly increased during 1971-1975. They amounted to 154.7 billion zlotys, compared to 86.2 million zlotys during the preceding five-year plan. Despite the high growth rate of investment outlays for municipal management and expansion of basic technical infrastructure, provisions were not made in advance for land development. As a result, the share of land development taking place concurrently with housing construction is growing. In 1975 this share averaged 11 percent nationally; in 1976 it rose to 31 percent; in 1978 it was 40 percent; and it now stands at approximately 53 percent.<sup>1</sup> The above situation has a dysfunctional effect on efficient implementation of housing construction, because enterprises that are working on technical infrastructure and buildings on the same construction site frequently get in each other's way.

In accordance with the Eighth Congress directive, 1,700 thousand dwellings will be completed during 1981-1985, including 150,000 by modernization of existing resources. Reduction of investment outlays in the next five-year plan does not mean that the general policy of ensuring each family its own dwelling in the 1990's is being abandoned.

During the 1970's, the share of outlays for the housing industry, construction materials, land development and heating-plant systems in the entire national investment increased from 19 percent in 1971 to 30 percent in 1980. During 1971-1979, 144 house factories were built, which means that outlays now allocated to the overall housing industry can be designated for production of indispensable materials and finishing products. However, better use must be made of existing production potential in the industries co-producing with the construction industry.

Thus there must be a decided improvement of management efficiency in every sector in the 1980's. This is imperative not only because party resolutions and administrative orders mandate it, but also because internal and external conditions related to economical management of materials, raw materials and energy demand it.

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<sup>1</sup> W. Dabrowski, "Current Tasks in Housing Construction," *NOWE DROGI*, 1979, No 7 362, p 48.



The Eighth Party Congress outlined the strategic courses of action for the next five-year plan. It also committed all party and administrative units to broader action aimed at full implementation of the program outlined.

To implement the investment process, the party's resolution requires:

- improvement in operation and efficiency of investment processes,
- increase in work-shift rate in the building materials industry,
- a higher level of operation and utilization of machinery, equipment and transport means,
- reduction in unit standards of materials and raw materials consumption and improvement in materials management efficiency and inspection of on-site materials consumption,
- reduction in implementation cycles,
- improvement in construction quality,
- reduction in prime costs,
- increase in labor productivity by improvements in organization and elimination of manual labor,
- wider application, in addition to large-panel technology, of other material-conserving and energy-conserving technologies that would permit better utilization of the production capacities of construction-materials plants and of local raw materials,
- strengthening of the role of the investment plan, increased financial discipline and increased efficiency in the inspection system,
- improvement in economic-financial instruments in order to more effectively enhance public management efficiency.

It appears from the above that to ensure implementation of the primary socio-economic goals, broadly conceived organizational and techno-economical incentives must be skillfully introduced into management practice.

As concerns improvements in organizational efficiency, in accordance with the Party Congress' decision, a broad assessment of the economic-financial system's present state of planning, management and functioning must be made. Past analyses have shown that the main source of inefficiency in the investment process is improper organization and management, excessive splitting-up and formalization of all decisions, inflation of organizational structure on all levels and lack of proper coordination.<sup>4</sup>

An important factor interfering with the efficient course of the investment process is the failure to observe scientific organizational procedures, especially underrating the preparation stage in the investment process, to which much more effective labor time should be allocated than has been done heretofore (the author's studies show that 37-42 percent of effective labor time should be allotted for this purpose).

<sup>4</sup> A. Kaputka, "Investment Paradoxes," PRZEGLAD TECHNICZNY-INNOWACJE, 1978, No. 3 and "Organizational Dysfunctions in Investment Processes," PROBLEMY ROZWIĄZANI, 1979, No. 2.

only after mistakes in the investment process are completely diagnosed can specific efficiency-promoting suggestions be developed. It appears that the ultimate aim, particularly in relation to the smaller voivodships, which will be most appropriate to local needs and capabilities, will be an organization of voivodship general construction plants. Such an organization would be in accord with the text of the PZPR Central Committee report presented at the Eighth Party Congress and would comply with the main trends of the already-begun decentralization of certain powers to the voivodes.

A great deal of improvement in construction is possible by selecting the proper technology for construction of buildings, their location, number of stories, by economical and efficiency management of materials and energy and utilization of on-site equipment, etc. According to W. Bien's<sup>5</sup> studies, traditional (cheapest) technology's share has dropped from 12.7 percent in 1970 to 1-2 percent in 1980; large-block construction also dropped, from 60 percent to 11 percent. These technologies are being replaced by the large panel, which is also the most expensive. In 1980, 80 percent of all buildings will be built using large panels. Apart from the emergence of a so-called monoculture in Polish housing construction, the investment cost of large-panel technology in housing construction is too high. One solution would be the introduction, to a larger degree than in the past, of a monolithic technology, which is more economical from the standpoint of materials consumption. It provides, for example, a 50 percent savings in cement, 20 percent in steel, and also in transport and manpower.<sup>6</sup>

From among many technical factors we will indicate still one more, namely the share of multi-family buildings over five stories high, which increased from 11 percent in 1970 to 44.4 percent of total construction in 1978. Aside from higher construction costs (an average of 20 percent), maintenance costs of multi-story buildings are also higher: 30 percent more for 6-10 stories, 25 percent more for 11-13 stories, and by as much as 60 percent more for buildings over 14 stories.<sup>7</sup>

It is not possible to discuss in one article the effect of other technical factors in promoting better utilization of materials and raw materials, better utilization of construction equipment, elimination of stoppages at many construction sites for various reasons. There is much room for improvement here.

Serious losses in construction occur as a result of poor quality of construction and the necessity for corrective work. Such losses are estimated at

<sup>5</sup> W. Bien, "Some Conditions for Implementing the Housing Program," *NOWE DROGI*, 1979, No 3, p 74.

<sup>6</sup> B. Reznicki, W. Skwarak, "Steps to a Dwelling," *PRZEGLAD TECHNICZY-INNOWACJE*, 1980, No 11, p 12 et seq.

<sup>7</sup> W. Bien, "Some Conditions for Implementing the Housing Program," *NOWE DROGI*, No 3, 1979.

1 to 5 percent of total costs, which indicates the seriousness of the problem. The problem of quality in all construction, so strongly emphasized during deliberations of the Eighth PZPR Congress, requires more searching analysis. The quality of construction-assembly work, finishing work, etc., is affected not only by the work of the builders themselves, but also by the work of many enterprises supplying poor-quality raw materials, other materials and technical equipment. This situation will not improve merely by publishing more rules,<sup>8</sup> which are not being observed.

In the author's opinion, improvement in quality of housing construction requires basic changes in inspection and control.<sup>9</sup>

Improvement in quality of construction-assembly work and materials requires a number of actions, starting with planning, which also includes comprehensive indexes on quality, durability and reliability of materials and equipment and a system of rewards and vocational training.

The housing construction program is, in accordance with an Eighth Congress resolution, a political program aimed at solving an acute social problem. There is no place in this program for any kind of waste or lack of efficient management.

In implementing the socioeconomic strategy outlined by the Eighth Party Congress, the human factor, its attitude and commitment, and receptivity to innovations, will have a deciding influence.

Motivation, in the broadest meaning of the word, is a very important problem in developing a creative attitude, both in the managerial staff as well as in all enterprise personnel. The task of the motivation system should principally be the integration of all enterprise personnel towards implementing the assigned main goal by coordinating and directing the individual goals of its members. The broadly drawn motivation system should allow for initiative, ingenuity and commitment of the personnel. It should encourage the managerial staff to introduce innovations, apply modern management methods, take risks in management operations, etc. Very often the motivation problem, both in practice and in literature, is confined to the economic sphere, particularly to wage incentives. Without minimizing the value of economic instruments, such opinions should surely be regarded as improper for they simplify the problem. J. Pajestka's statement appears

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<sup>8</sup> In addition to the construction code, Government Presidium decision No 42/77 dated April 15, 1977 was recently issued on improving housing construction quality, and also a law dated February 8, 1979 on quality of construction produces, services, works and buildings (Law Journal, 1979, No 2, item 7).

<sup>9</sup> This subject has been discussed in another article: A. Kapustka, "Quality Control in Housing Construction," INWESTYCJA I BUDOWNICTWO, No 4, 1980.

to be correct when he writes: "Reducing motivation factors simply to narrowly conceived material incentives is a damaging simplification and even distortion, undermining not only the meaning of socialism, but also the meaning of those human values that shaped the modern civilization."<sup>10</sup>

The motivational driving force under socialistic conditions is the striving for humanization of labor and for society's ever fuller participation in the process of efficient management and creation of the future. The basic condition for success in implementing the investment process should be skillful cooperation with personnel, creating a climate of joint responsibility of the entire working collective for implementation of investment, replacing rigid orders and prohibitions with positive incentives, both moral and material. A positive role can be played here by consistent management and direction of working teams using a method described in the literature as "management by objectives." Implementation of investment as an all-social objective is announced to individual working teams, allocating them means and powers. Partial objectives should be accurately formulated also from the quantitative standpoint, and then a responsible accounting of their performance should be made according to the same rules.

Humanization of labor, about which so much has been written lately, is also the adjusting of working hours to actual conditions, good organization in transporting workers to the job site, creating proper living conditions for them, ensuring complete work safety, etc.

To motivate working teams by using economic instruments, it is necessary first of all to clearly define the bases for calculating rewards for performing a task. Any complications or inconsistencies in this area cause needless bitterness and alienation of workers. By way of example, the rewards for workers paid by the flat piece-rate system should not be changed, regardless of the amount of money earned by the work gang if it is doing its job properly. The measure here should be that the assigned job is done on time, of good quality, and with materials savings.

Responsible introduction of a motivation system should include all participants in the investment process, and particularly the contractors, suppliers of machines and equipment, the design offices, and investors. Such a broadly conceived investment process systems motivation will help reduce the red tape between these units, eliminate needless documentation, cost estimates and copious correspondence, and create "psychical bonds" which will have a positive effect on harmony in investment implementation.<sup>11</sup>

<sup>10</sup> J. Pajestka, "Factors and Interdependence in the Country's Socioeconomic Development," Warsaw, 1975.

<sup>11</sup> M. Kastrzebski cited some advantages of introducing an actual and not just a formal motivation program. "Controlling Investment Processes." in "Decyzja -- Analiza Systemowa Organizacji." Collected works, A. K. Kozminski, Editor, Warsaw, 1979, pp 172-191.



## AGRICULTURAL DEVELOPMENT IN 1950-80 PERIOD REVIEWED

Bucharest REVISTA ECONOMICA in Romania No 31, 1 Aug 80 pp 5-7

[Article by Oprea Parpala: "23 August 1944--23 August 1980--A Period of Profound Transformations and Superior Results in Romanian Agriculture"]

[Text] Thirty-six years ago the Romanian people set out on a fundamentally new path of socioeconomic and political construction--the path of socialist revolution in all domains of activity. In those years radical changes have taken place in the whole socioeconomic configuration of the country, essential mutations have occurred which have propelled the economy and the Romanian society to hitherto unknown levels of progress and civilization.

The historical event of 23 August 1944 opened radically new perspectives for the modernization and accelerated progress of agriculture, thus laying the cornerstones for its socialist transformation. At the same time it should be stressed that the basically new elaboration of the Romanian concept of socialist agrarian policy took place at the Ninth RCP Congress on the bases of the reconsideration of the role and the functions of agriculture in relation to the whole economy, the objective of transforming agricultural labor into a form of industrial labor and the content, the necessary stages and the ways of carrying out a profound agrarian revolution in Romania, which would contribute substantially to the economic and social progress of the country, to the prosperity and happiness of the people.

#### From Quantitative Accumulations to Qualitative Transformations

The Ninth RCP Congress took place at a moment in which--as early as 1962--the socialist relations of production had been generalized in Romanian agriculture. In this context the concept appeared according to which the full and final victory of socialist production relations in the villages was considered to be the conclusion of the socialist agrarian revolution with the result that the new, socialist relations, by their nature alone, would automatically prove their superiority, generating ever greater yields

and superior economic efficiency. Applied in practice, such an understanding of the content of the socialist agrarian revolution would have doomed Romanian agriculture to technical backwardness, to development at a snail's pace, which, consequently, would have deepened the differences (contradictions) between industry and agriculture, village and city, between workers and peasants. As a matter of fact, during the 15 years before the ninth congress, agriculture received limited investment funds and certain phenomena of distrust in the peasant's capacity to use modern technology, based on chemicalization, irrigation and mechanization, also manifested themselves.

It is the historical merit of the RCP secretary general Comrade Nicolae Ceausescu, that, beginning with the elaboration of the documents for the Ninth RCP Congress, he militated with vigor and creative thinking for the implanting of a new concept of agrarian development in socialism, a concept according to which the socialist agrarian revolution does not end with the victory of the new production relations, but has to be continued and supplemented naturally by revolutionizing the technical and material base of agriculture, the methods and forms of organizing labor and directing production, according to the stage attained in the development of the factors of production, by perfecting the relations of production on a continuing basis. Such a concept of the ways to carry out a profound agrarian revolution also corresponds to the direction of the evolution of the population agricultural land ratio. But, under the conditions prevalent in Romania, demographic growth surpasses by far the possibilities for expanding the agricultural area (with trends toward reducing the land supply per capita). At the same time, the sharp decrease in the population involved with agriculture increases the portion of agricultural land per person working in this branch. The combined influence of the two factors can lead to only one logical and necessary effect: an increase in investments per unit of land in order to increase continuously both the yield per hectare and the technical equipping of agricultural labor, to raise labor productivity at least in accordance with the increase in land per person working in agriculture.

This is why the 1965-1980 period is, first of all, a period of significant quantitative accumulations in expanding and modernizing the technical-material base of agriculture. This new reorientation was based upon a consistent investment policy (mainly of state funds but also of the funds of the agricultural units) which insured the technical progress required by this branch: mechanization, chemicalization, irrigation, development of animal breeding, production of high-quality seeds, planting material and reproduction animals.

We believe that, in order to appreciate the dimensions of this increase, the figures in Table 1 do not require any comments. They reflect, without any doubt, the progress in developing the technical-material base of our agriculture. A number of other considerations support this idea.

Table 1. Evolution of the Technical-Material Base of Agriculture  
During the 1950-1978 Period

Indicators	Unit of Measure	Years			1978 Com- pared to 1950 (in percent)
		1950	1965	1978	
Total agricultural area	thousand hectare	14,324	14,791	14,965	104
per person working in agriculture	"	2.3	2.7	4.5	196
per inhabitant	"	0.9	0.8	0.7	78
Investments-total	mil. lei	668	7,666	26,540	40 times
per agricultural hectare	"	47	519	1,773	38 times
per person working in agriculture	"	108	1,398	7,940	74 times
Fixed funds-total	bil. lei	41.0	65.2	175.5	428
per agricultural hectare	"	2,867	4,408	11,727	409
per person working in agriculture	"	6,600	11,905	92,468	795
Traction power-total	ths. HP	--	4,171	8,427*	202
per agricultural hectare	"	--	0.3	0.6	200
per person working in agriculture	"	--	0.8	2.1	263
Physical tractors-total	Pcs.	13,713	81,356	138,840	10 times
arable hectare per tractor	"	684	121	71	10
Consumption of chemical fertilizer	ths. tons	5.9	266.4	1,111.1	188 times
per arable hectare	(active subs.)	0.6	27	113	188 times
Irrigated arable area	ths. hec.	--	213	1,736	815
percent of total	percent	--	2.2	17.8	--
No of cattle-total	ths. head	4,502	4,935	6,511	145
per 100 hectare	"	32.4	34.9	45.9	142
per capita	"	0.3	0.3	0.3	100
No of swine-total	"	2,197	5,365	10,337	471
per 100 arable hectare	"	23.4	54.7	105.7	452
per capita	"	0.1	0.3	0.5	500
No of sheep-total	"	10,222	13,125	15,612	153
per 100 agricul hectare	"	71.4	88.7	104.3	146
per capita	"	0.6	0.7	0.7	117
No of poultry-total	"	17,610	40,085	99,725	566
per 100 hectare with grain	"	254	592	1,580	622
per capita	"	1.1	2.1	4.6	418

\* 1975

Source: Statistical Yearbook of the Socialist Republic of Romania, 1979, Central Directorate for Statistics

During the 1965-1978 period the investments allocated to agriculture were over 200 billion lei, which is about 3.5 times the investments during the whole 1951-1965 period. On that basis, a strong increase was registered in the technical equipping of labor (no matter which element we are referring to--fixed funds, traction power, consumption of chemical fertilizers, irrigated area or numbers of production animals. If, as far as the consumption of chemical fertilizers per hectare of arable land is concerned, Romania has gone half-way toward reaching the level of the developed countries; according to the size of the irrigated area and its proportion to the total arable land, Romania holds one of the first places in Europe.

But, it would, to say the least, be erroneous to measure this period only by the quantitative achievements since, at the same time, significant qualitative transformations have taken place too. As a matter of fact, the very objective of our future development--to achieve a new quality in all domains, including agriculture--does not exclude, but requires, the existence of qualitative changes which have already been made in the course of the development of agriculture to date. We will mention only a few of them.

Thus, the slight expansion of the agricultural land was mainly achieved through the most intensive categories of use (such as vineyards and orchards), marking a qualitative improvement in the use of soil. The same tendency, toward new quality, was also indicated by the structure of the cultivated areas. The reduction in the areas planted with grains was accompanied by the expansion of those cultivated with technical- and leguminous plants. The modifications registered within various crop groups confirm the same qualitative orientation. Within the grain crops, while maintaining the priority given to growing seed corn, barley has started to expand. There was a considerable expansion in the category of the leguminous seed crops, soybeans and in the technical crops group, sugarbeets and sunflowers. Significant changes took place in the fodder crops, with an increased share of the perennial leguminous crops (lucerne and clover). The expansion of fruit-tree and vine plantings was made under the circumstances of clearing large surfaces from the old plantings and reestablishing intensive plantings.

Generally speaking, the quantitative increase per unit of land of all elements of the technical-material base of agriculture brought about important steps toward qualitative transformations, since it gave agricultural production an increasingly intensive character. The qualitative element manifested its presence in the whole process of quantitative accumulations in our agriculture. For example, the structure of investments shows a tendency to increase the share of those investments intended for the active part of the fixed funds (equipment and machines) and to decrease the share of investments for constructions. In the structure of the traction power, the machine traction has become



predominant and, within it, an increase in the share of the means of transport and stationary engines intended for zootechny and irrigations, has been registered. Important sectorial changes also took place in the structure of fertilizer consumption, in the favor of the cooperative sector of the agriculture, with a view to standardizing the conditions of production on a given territory. The liquidation of the big discrepancies in distributing the consumption of chemical fertilizers, territorially and for crops was also started, and a more balanced ratio among nitrogen, phosphorus and potassium was assured at the same time. Setting up land for irrigations both the obtaining of a rational proportion between the big systems and the local systems and the use of more economical methods of irrigation are considered. In the field of animal raising an increase on a priority basis of the meat-producing species and categories is noted. At the same time, research and production were oriented toward the creation and use of new varieties and hybrids of plants and toward the improvement of animal breeds, in order to increase their production potential.

#### Professionalization of the Labor Force

Under the impulse of the development of the whole national economy and of the increase of the technical-material base of agriculture, the agricultural labor force has registered a double process: a (absolute and relative) reduction and an increase in professional training.

The significances of the accelerated decrease in the population involved in agriculture are multiple, but the transformation of simple work into complex work is of special interest. The decrease in the population involved in agriculture (see Table 2) is not a simple quantitative transfer, but implies important quantitative transformations for the population left to work in agriculture because its decrease in number takes place in the framework of an increase in the technical endowment of the agricultural work--which, in its turn, requires an increase in the technical training of all agricultural workers especially since the new technology is also generating new trades. We have in mind not only such "top" professions in the villages like those of tractor driver or agricultural mechanics, but also those which concern the large mass of cooperative members: animal tenders, vegetable growers, fruit-tree growers, horticulturalists, etc. This is the reason why the problem of developing and improving agro-zootechnical mass education has become a component (approved by law) of agrarian policy in our country, permitting a qualitative leap from the former individual peasant to the new peasant, a specialized agricultural worker, who cooperates in the work process with the other agricultural workers.

At the same time, agricultural specialists (with intermediate and higher studies) have a decisive role in rationally organizing production, in using modern technologies with a view to increasing production and efficiency. This also explains the special attention paid to the equipping

Table 2. The Agricultural Labor Force During the 1950-1978 Period

Indicators	Unit of Measure	Years			1978 Compared to 1950 (in percent)
		1950	1965	1978	
Population now living in agriculture - total	thousands persons	6,209	5,477	3,345	54
Share of agricultural population in the total employed population *		74.1	56.5	32.5	X
Agricultural specialists total, with:					
intermediate education		11,152*	24,148	41,667	374
higher education		5,825	12,712	17,923	308
		5,327	11,436	23,744	446
of which:					
agronomical		1,880	7,270	11,663	301
physiological engineers		612	1,625	3,107	508
veterinarians		401	811	3,196	797
mechanical engineers		434	785	2,632	606

\*Data refer to year 1960

of agriculture with an ever larger number of specialists, so that, today compared to 1965, an agricultural specialist with higher studies is responsible for an area half the size. Among these, a special place is occupied by the research cadres, creators of new varieties and hybrids of plants and improvers of native animal breeds, as well as the teaching staff whose links with production contribute to the raising of the level of development of the whole agriculture.

#### The Continued Perfecting of Production Relations

The agriculturally based agrarian policy starts with the idea that the development of production forces also necessitates the perfecting of production relations, permitting a more efficient use of the production forces. In this context, our agrarian policy, established in a superior way at the ninth congress of the party, on the basis of the idea that the agricultural enterprises (state-owned and cooperative) remain the basic units of the agriculture, encouraged and supported the expansion and development of various forms of cooperation and association in work and production, up to the superior forms currently established by statute of the form of the intercooperative economic association or of the

association (cooperation) between the agricultural production cooperatives and the state units or the consumers cooperative units. Apart from the positive economic effects, thanks to increased possibilities for developing production forces, these new forms of association used their contribution to the appearance of new, more comprehensive, forms of ownership in agriculture: intercooperative ownership, in the case of the intercooperative animal associations; joint state and cooperative ownership, in the case of an association (cooperation) between the IAP (agricultural production cooperatives) and state units. Such new elements of the agricultural patrimony represent important steps towards bringing closer and transforming the two forms of ownership in agriculture: intercooperative and cooperative into the property of the whole people.

The same priority objective under the circumstances of bringing closer, in addition, production conditions in the IAP and the IAS (state agricultural enterprises) is pursued by the constant perfecting of the leadership bodies of agriculture. The united state and cooperative agroindustrial councils (which have their roots in the specialized territorial councils and, then, in the intercooperative councils) are the specific form, according to Romanian conditions, of economic and social integration in agriculture.

#### The Consequences of the Policy for Modernizing Agriculture

The modernizing of the technical-material base of agriculture, under the circumstances of the raising of the professional training of all agricultural workers and of providing an ever larger number of agricultural specialists, had a positive influence on the increase of labor productivity and, of production, and on increasing the contribution of agriculture to the increase in the national revenue, to the improvement of the living conditions of the whole people etc.

The quantitative increases (see Table 3) were, in this respect, also, accompanied by qualitative changes. In this way, labor productivity has become the main factor for increasing agricultural production, giving our agriculture the essential features of a modern agriculture. Moreover, in its average annual rate of increase of overall agricultural production (six percent during the 1966-1978 period) Romania holds one of the first places in the world. At the same time, the very rapid growth of agro-technical production in animal and vegetable production expresses the qualitative changes occurring in the structure of overall agricultural production, by increasing the share of animal production (from 36.3 percent in 1965 to 44.5 percent in 1978), which is becoming and should become the primary branch of animal agriculture.

One of the most obvious results of the qualitative transformations occurring in the evolution of the Romanian agriculture is the increasing contribution to the growth of the national revenue.

Table 1: Results of the Process of Intensifying and Modernizing Agriculture During the 1950-1978 Period

Indicators	Unit of Measure	Years			1978 Compared to 1950 (in percent)
		1950	1965	1978	
Gross agricultural production (total)	bil. lei	37.0	71.4	127.9	346
cereal	"	22.1	45.4	71.2	322
oilseed	"	14.9	26.0	56.7	378
Net agricultural production		22.9	38.6	62.2	272
Labor productivity					
expressed by:	lei per				
gross output	person	5,960	13,036	38,236	642
net output	"	3,688	7,648	18,595	504
no. of persons fed by person		2.6	3.5	6.8	262
Physical production of the main agricultural products:					
1) grain (total)	thousand	8,232	10,887	19,126	232
wheat	tons	3,338	4,416	6,529	196
corn	"	3,965	5,853	10,635	270
sorghum	"	266	504	806	303
millet	"	1,293	2,637	6,334	490
legumes	"	1,590	1,657	3,500	220
fruits	"	590	919	1,374	233
grapes	"	793	908	1,439	181
beet (for sugar)	"	695	982	2,250	324
milk	thous. hl	23,476	31,636	31,625	135
pigs	million	1,100	2,630	6,650	605
Yield of the main agricultural products, per capita:					
grains	kg	316	682	368	275
oilseed	"	13	30	37	285
meat	"	36	158	267	742
fruits	"	98	115	204	208
beet	"	40	59	111	277
milk	liters	141	171	176	277
pigs	per org	67	136	304	454
Input of agricultural products:					
raw materials for food	thous lei				
consumption	currency	148	510	1,703	12 times
ind. consumption	"	181	919	3,581	20 times
Average net compensation (lei/mo)		241	939	1,994	821
in agricultural working cadres					
1950-1955	thousand	—	1,281.0 <sup>3)</sup>	1,265.4	99
1961-1965	million lei	—	941.6 <sup>3)</sup>	2,415.6	256

1) Average for 1951-55; 1961-65; and 1976-78; 2) 1950, 1965, 1978; 3) 1970



The development of the production forces, under the circumstances of perfecting production relations has allowed a steady and balanced increase of the production in all the specific branches and sectors of Romanian agriculture, with a view to assuring the complete self-supplying of the population's consumption, on the basis of scientifically substantiated norms. Thus, grain production (mainly, corn and wheat) has continued to receive special attention, as being the pivot around which all the other agricultural sectors are developing (especially animal-breeding). The need to improve the structure of food consumption by developing intensive branches, specifically for Romanian agriculture has led to a significant increase in the production of vegetables, grapes and fruits. Within animal production, a significant increase has been recorded by meat production, as a basis for improving the structure of the population's food consumption.

The qualitative changes registered in the structure of agricultural production were, naturally, reflected also in the structure and evolution of the production and of the consumption of the main agricultural products per capita. While potato consumption remained almost the same, and grain consumption decreased, the consumption of vegetables and fruits, especially meat and eggs (suppliers of protein of animal origin) have registered the largest increase. If, in its per capita production of various agricultural products (first of all, grains) Romania is close to the level attained by the developed countries, the evolution of the food available each day per capita (in calories and grams of protein) situates our population among the peoples of the world best provided with food resources, this being a guarantee for developing a vigorous people, with a work capacity (physical and intellectual) up to the level of the demands made by the present technical and scientific revolution.

The increase of the production capacity of Romanian agriculture is also attested to by the increase in goods available for export, especially as increased food commodities, with a higher export efficiency.

In conclusion, the 1950-1980 period is the period of a special dynamism in the development of Romanian agriculture, the period in which the significant quantitative accumulations in developing the technical-material base and training specialists gave rise to qualitative changes, a premise for the transition--in the 1981-1985 five-year plan--to a new quality, which took concrete form in a substantial increase in harvests and sown/technical yields, in the elevation to a superior level of the economic activity carried on in this basic branch of the Romanian economy.

## PROVISIONS OF FOREST CONSERVATION, DEVELOPMENT PROGRAM

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[Article by Gheorghe Hanganu and Petre Cioclu: "A Resource That Must Be Exploited and Used as Efficiently as Possible: Wood"]

[Text] On the basis of the decisions of the 11th party congress, on the initiative and instructions of the secretary general of the party, Comrade Nicolae Ceaușescu, there was drawn up the National Program for the Conservation and Development of Forest Resources in the 1976-2010 Period, which, after being subjected to public discussion, was adopted by means of Law No 2/1976. The program contains, in a unitary view, the measures that are required in order to rationally manage the forest holdings, to introduce a normal rate of cutting and regeneration of the forests, to raise their productivity, to improve the protective functions of the forest. The implementation of the measures in the program will provide for the practicing of intensive silviculture, the raising of its contribution to the development of the national economy, to the conservation of the environment.

We present below an analysis of the way in which the main tasks contained in the program with regard to forest management are being fulfilled and the results obtained in the years that have passed since its adoption.

A First Component: the Area and the Structure of the Forests According to Species

One of the most important provisions of the program refers to maintaining in the future the forest resources at least at the current area. This provision has been and is being fulfilled, so that at the start of 1980 the area of the forest resources was 6,334,000 hectares, 14,000 hectares more than the program's provisions for this year. The respective situation is due to the greater exigencies of the forestry units with regard to requests for removal of land from the forest resources for the needs of other sectors of the national economy (investment objectives, overhead powerlines, drilling and so on), as well as to the entry of land from the agricultural resources--unfit for farm crops, vinegrowing and fruitgrowing--into the composition of the forest holdings, which has counterbalanced the removals.

The task concerning the afforestation of land denuded by means of current cutting, of degraded land taken over from agriculture and of land earmarked for the planting of forest vegetation is also being fulfilled. These good results have also occurred due to the fact that both the areas that were to be afforested and the material resources needed for achieving them have been provided by means of the sole national plans for economic and social development. According to kinds of land, one finds an overfulfillment of the afforestation in the forest resources by 11,900 hectares (including 8,900 hectares by the units of the Department of Silviculture) and a total underfulfillment of 2,900 hectares in the unproductive (degraded) land outside the forest resources (including 6,600 hectares in the land held by the kolkhozes [agricultural productive cooperatives] and others in zones without cooperatives) (see the table). It is necessary that the present holders of degraded land proceed at once to utilize it, especially for agriculture, and that, when this is not possible, it be afforested--with the help of the forestry bodies--so that no square meter of the homeland's territory remains unutilized.

The orientation contained in the program with regard to improving the structure of the country's forests according to species has also been followed in the sense that the afforestation with coniferous trees has been preponderant (73 percent in the forest resources administered by the Department of Silviculture, as compared with the 70 percent stipulated as a target), which will provide for an increase in the proportion of coniferous forests to 40 percent in the next 30-35 years, as compared with the 28 percent that it was in 1975. In this way, it will be possible to satisfy more and more fully the national economy's need for coniferous wood, especially for the production of cellulose.

Within the afforestation done, the restoration of poorly productive forests (700,000 hectares on the date of preparation of the program) has been continued by means of their replacement with new, vigorous, high-yield plantings. The results obtained between 1976-1980 (120,700 hectares) surpass the average annual rate of 22,000 hectares stipulated in the program. The restoration of this area has been achieved mainly through afforestation with fast-growing species, which will lead to the obtaining of an output 2-3 times higher on that area and to a rise in lumber production from 30-40 percent, as it is at present, to 75-80 percent.

In order to be able to satisfy the growing need for pulpwood as quickly as possible, the program provides for the continuation of the creation of special crops for this assortment, so that by 2000 a total area of 450,000 hectares will be reached. The target that applies to the 1976-1980 period (71,000 hectares) has been fulfilled and even overfulfilled by 4,200 hectares. The advantage of the specialized crops for pulpwood--for which selected seedlings are utilized--resides in the fact that they will be able to be harvested at an age of 30-50 years for coniferous trees and 15-20 years for soft deciduous trees, as compared with 100-120 years and 20-25 years, respectively, in ordinary forests, thus resulting in a rise in

production of 0-40 cubic meters per year per hectare for coniferous crops and 0-100 cubic meters per year per hectare for deciduous crops.

Table: The Degree of Achievement of Afforestation in the 1976-1980 Period

	Unit of measure	Stipulated	Executed	%
1. All afforestation--total	thousands of hectares	278.0	284.4	102.3
Of the total, according to kinds of land:				
In the forest resources--total, including by:	thousands of hectares	234.0	245.9	105.1
The units of the Department of Silviculture	thousands of hectares	208.0	217.5	104.6
The Danube Delta Central	thousands of hectares	2.7	2.7	100.0
People's councils	thousands of hectares	23.0	25.7	111.7
In unproductive (degraded) land outside the forest resources--total, including by:	thousands of hectares	37.0	31.1	84.1
The units of the Department of Silviculture	thousands of hectares	17.0	17.7	104.1
The present holders (CAPs and others in zones without cooperatives)	thousands of hectares	20.0	13.4	67.0
Along roads and watercourses--total	thousands of hectares	7.0	7.4	105.7
2. The structure of the afforestation according to groups of species in the forest resources administered by the units of the Department of Silviculture--total, including:	thousands of hectares	208.0	217.5	104.6
Coniferous trees	thousands of hectares	149.4	158.8	106.3
Percentage of the total	%	71.8	73.0	
Deciduous trees	thousands of hectares	58.6	58.7	100.2
Percentage of the total	%	28.2	27.0	
Of the total, fast-growing species (coniferous and deciduous trees)	thousands of hectares	133.5	134.5	100.7
Percentage of the total	%	64.2	61.8	

It should be mentioned that in afforestation the valuable indigenous species, adapted best to the soil and climatic conditions in our country and having a high industrial value, (spruce, fir, oak, durmast, ash, sycamore maple and so on) and other species that are suited to the natural conditions in our country (larch, pine, Douglas fir and so on) have been



promoted for cultivation. The genetic certification of all afforesting material was introduced in 1978 in order to provide for the growing of stands with increased viability, greater resistance to harmful factors, and higher productivity.

#### A Second Component: the Tending of the Forests as a Factor in Increasing Their Efficiency

The forest takes a long time from its creation to maturity. If in this interval the process of development of the forest is left only under the influence of the laws of nature, there arises the situation that low-quality trees with a low economic value grow in the forests. In order to prevent such a situation, forestry science and practice have established a complex of activities for tending the plantings and stands--clearing, pruning and thinning--which have the role of eliminating the unsuitable specimens during the forest's development, of favoring the growth of vigorous trees, in optimum densities, with high-quality wood, so that at logging time the productivity and the value of the output per hectare are maximum. For the 1976-1980 period, the program provides that annually an area of 280,000 hectares of forest is to be covered with tending work, a target that was fulfilled by 1979 with an average annual overfulfillment of 4,000 hectares, an overfulfillment that is expected to be maintained in 1980 too.

In order to provide a suitable state of plant health in the forests, sanitary cutting--fallen, broken, dead, insect-ridden and wind-toppled trees--has been done on an average annual area of 1.2 million hectares, as compared with the 1 million hectares stipulated in the program. In this way, large quantities of timber utilized in industry or as fuel in rural areas have been extracted and brought into the economic circuit.

Although the program's provisions concerning improvement and sanitary cutting have been fulfilled, one still finds forests in which the tending operations have not been performed at the necessary level, due to the fact that at present the density of forest roads per hectare of forest is still below the optimum level. The problem will find its solution in proportion to the construction of forest roads, the growth of the accessibility of the country's forests, which would permit the application of tending and sanitary measures over the whole area of the forest resources under as economical conditions as possible. The combating of pests (defoliating caterpillars, bark and wood beetles and so on) has constituted a constant concern within the action of systematically tending the forests. To this end, in accordance with the provisions of the program, action has been taken to identify and combat them in due time, to apply projects for preventing their appearance en masse. It should be noted that the modern methods of combating them have been expanded: the biological method with biopreparations (2,800 hectares at the level of 1979), the methods with pesticides having selective properties and a low degree of pollution (4,200 hectares) and chemical treatments with small doses per hectare of forest (90,400 hectares).

Special attention within this work has been devoted to preventing the multiplication of bark and wood insects in the zones with wind- and snow-toppled trees in the coniferous forests in which such natural disasters have been registered in past years. By this means of acting, the proper development of young stands and a good state of plant health in all forests in the country's forest resources have been provided.

#### A Third Component: the Rate of Cutting

In order to increase the volume of logging in the future, the program provided for the limitation of the annual cutting to 20 million cubic meters of raw timber "on its feet" in the 1976-1985 decade, including 16 million cubic meters of main products and 4 million cubic meters of byproducts from thinning. The actual cutting in 1976-1979 and the preliminary cutting in 1980 are situated, as an annual average for the 1976-1980 period, 500,000 cubic meters below the stipulated level.

Concomitant with keeping within the planned annual quota of the volume of cutting, the aim has been, in the as near future as possible, to correlate the logging operations with the forest's possibility not only on the scale of all the forest resources but also on the level of each of the 2,200 production units--a basic technical unit in organizing the production of wood in silviculture--into which the forests administered by the Department of Silviculture in the NEFMC [Ministry of Forestry Economy and Construction Materials] are divided. The results obtained thus far, although they have improved the situation, are still far from being satisfactory. Thus, while in 1975 the volume of local excesses (at the level of the production units) totaled 3.3 million cubic meters of timber and turned up at 866 production units, in 1979 this volume had fallen only to 2.8 million cubic meters, affecting 777 production units. This situation is due to the low accessibility of some forests--a consequence of the still insufficient rate of equipping the forest resources with roads that would also provide for the penetration of the logging operations to the hard-to-reach forests earmarked "one after another" for cutting. It should be mentioned that, within the volume of cutting achieved, the timber coming from wind- and snow-toppled trees has been gathered with priority, there being reduced accordingly the cutting of timber "on its feet," in order to observe the planned annual quota of cutting and the good management of forests.

The successive, progressive, selection and combined cutting, verified in our forestry practice, which permits the obtaining of forests with valuable indigenous species, perfectly adapted to the soil and climatic conditions of the respective zone and, even more, to the local ones, has been expanded in order to provide for the natural regeneration of the forests from seed--a more efficient method than afforestation from a technical and economic viewpoint. Concomitant with this action, in accordance with the provisions of the program, the clear cutting for the exploitation of timber has been restricted, it being limited only to pure spruce forests, to Canadian poplars and to the poorly productive forests that need to be reforested with

more productive species. In all these cases, the maximum cutting area in which clear cutting is applied has been limited to 5 hectares (in forests with special protective functions and in spruce forests) and at most 10 hectares in other forests.

In order to increase the volume of wood for industry and raise the labor productivity under the conditions of avoiding harm to the natural seedlings and the trees still standing, the technologies for exploiting the trees with a crown, long trunks, and boles have been expanded, so that in 1990, out of the total of 20 million cubic meters of timber approved for cutting, 13 million cubic meters will be obtained by utilizing the above-mentioned technologies. It should be mentioned that these new technologies demonstrate their superiority only to the extent to which they are applied properly. The failure to comply with the directions for application can inflict significant harm on the trees remaining after cutting and the natural seedlings, harm that, in time, is reflected in a decline in the quality of wood production, leading to the situation in which the eventual losses exceed the immediate economic advantages. This finding requires greater exigency on the part of the forestry enterprises for exploitation and transportation (IPST) in the differentiated application of the new technologies, depending on the land and stand conditions, so that harm caused to the forest is avoided or it is minimal. At the same time, it is necessary to seek to improve the technologies of exploitation, an action in which an important role goes to scientific research on silviculture and on wood exploitation and industrialization.

The achievements obtained in the 1976-1980 five-year period in the action of managing the forests, of continually increasing their economic and social value, constitute a basis, a premise for fulfilling in the 1981-1985 five-year period too the provisions that result from the Program for the Conservation and Development of Forest Resources.

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